#### DOCUMENT RESUME

ED 234 772

IR 010 847

AUTHOR TITLE INSTITUTION Holznagel, Donald C., Ed. MicroSIFT Courseware Evaluations (88-168). Northwest Regional Educational Lab., Portland,

SPONS AGENCY PUB DATE CONTRACT NOTE

National Inst. of Education (ED), Washington, DC.

400-83-0005

106p.; For Courseware Evaluations 1-87 (sets 1-5), see ED 226 765. Users are encouraged to reproduce the evaluations for further dissemination.

AVAILABLE FROM Northwest Regional Educational Laboratory, 300 SW

Sixth Ave., Portland, OR 97204.

PUB TYPE

Reports - Evaluative/Feasibility (142) -- Reference Materials = Directories/Catalogs (132) -- Information Analyses (070)

EDRS PRICE DESCRIPTORS MF01/PC05 Plus Postage. \*Computer Assisted Instruction; \*Computer Programs;

\*Course Evaluation; Evaluation Criteria;

\*Microcomputers

IDENTIFIERS

Courseware Evaluation; \*MicroSIFT; \*Resources in Computer Education; Software Evaluation; \*Software Rēviews

#### ABSTRACT

This document consists of 81 microcomputer software package evaluations prepared for the MicroSIFT (Microcomputer Software and Information for Teachers) Clearinghouse at the Northwest Regional Educational Laboratory, (NWREL) and distributed during 1983 as "sets" 6, 7, and 8. The concise, single-sheet resume describing and evaluating each software package results from an evaluation process that uses a network of describing and evaluating each software package results from an evaluation process that uses a network of established educational institutions and consortia (SIFTnet). Each review lists source, cost, additty established educational institutions and consortia hardware, required software, instructional purpose, level, subject, topic, medium of transfer, required hardware, required software, instructional purpose, instructional techniques, documentation available, instructional objectives (stated), instructional prerequisites (inferred), content and structure; estimated student time required, potential uses, major strengths, and major weaknesses. An evaluation summary rates packages on 21 criteria). The titles of the strengths, and major weaknesses. An evaluation summary rates packages on 21 criteria), the fittes of the software packages evaluated are as follows: duggles' Rainbow; Lessons in Algebra; Math Skills--Elementary; software packages evaluated are as follows: duggles' Rainbow; Lessons in Algebra; Math Skills--Elementary; Our Weird and Wacky World/Critical Reading Program; Reading With Critical Understanding; Rocky's Boots; Checkers; Chess: Clock: Computer Graphing Experiments; Computer Math Games; Create Vocabulary; Discover Lessons; Chess: Clock: Computer Graphing Experiments; Computer Math Games; Create Vocabulary; Discover BASIC: Expanded Notation; Math Facts/Number and Math Mastery A. B. C. and D. Multiple Skills; Number Basic Lessons and Math Mastery A. B. C. and D. Multiple Skills; Number Basic Lessons and Math Mastery A. B. C. and D. Multiple Skills; Number Basic Lessons and Math Mastery A. B. C. and D. Multiple Skills; Number Basic Lessons and Math Mastery A. B. C. and D. Multiple Skills; Number Basic Lessons and Math Mastery A. B. C. and D. Multiple Skills; Number Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery A. B. C. and D. Multiple Basic Lessons and Math Mastery Math. Reading with Understanding: Phonet; Prescriptive Math Drill; Sims: The Atom; The Programmable Cube; Three Mile Island; Vowels; Who, What, Where, When; Computer Math Activities, Volume 3; Mixed Number; Dragon Mix; Mile Island; Vowels; Who, What, Where, When; Computer Math Activities, Volume 2; Wordwright; Elementary Math; Math Computer Math Activities, Volume 2; Wordwright; Elementary Math; Math Skills-Junior High; Chemistry-Acids and Bases; Bumble Plot; Word Games; Division 1; Precision Timer; Arith-Magic; Geography; Reading Roundup; Earl's Word Power; Reading Flight; The Market Place; Computer Arith-Magic; Geography; Reading Roundup; Earl's Word Power; Reading Flight; The Market Place; Computer Arith-Activities, Volume 4; The Decision Shop; Krell's College Board SAT; CARIS; Reading Rally; Moptown; Bumble Games; Alpine Skier; Tennis Anyone?; Decimal Skills; Elementary, Volume 6-Social Studies; Mathematics Assessment/Prescriptive Program; Levels 5-7; President Elect; Career Directions; Cloze Plus Mathematics Assessment/Prescriptive Program, Levels 5-7; President Elect; Career Directions; Cloze Plus (Context Analysis); The Westing Game; Read and Solve Math Problems; Word Memory Program; Rhymes and Riddles; Vocabulary Skills; Prefixes, Suffixes and Root Words; Vocabulary Skills; Prefixes, Suffixes and Root Words; Vocabulary Skills; Context Clues; Diascriptive Reading; Bridge to Terabithia; Teasers by Tobbs; Call of the Wild; Facemaker; Map Reading; Eloppy Teaches How to Print Letters and Numerals; Riddle Me This; English, Volume 1; Story Machine; Social Floppy Teaches How to Print Letters and Numerals; Riddle Me This; English, Volume 1; Story Machine; Social Studies, Volume 2: Master Type: Word Master: Cartels and Cutthroats: (LMM)



MICROSIFT COURSEWARE EVALUATIONS (88-168)
(SETS 6, 7, AND 8)

1983

# U.S. DEPARTMENT OF EDUCATION NATIONAL INSTITUTE OF EDUCATION EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization organization organization.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

NORTHWEST REGIONAL EDUCATIONAL LABORATORY (NWREL) 300 S. W. SIXTH AVENUE PORTLAND, OREGON 97204 (503) 248-6890



# Juggles' Rainbow

PRODUCER:

The Learning Company

4370 Alpine Road -

Portola Valley, CA 94025

EVALUATION COMPLETED: February, 1983 at MECC, in Lauderdale, Minnesota

COST: Unknown

ABILITY LEVEL: Preschool through grade 1
SUBJECT: Readiness concepts
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple II, one disk
drive, monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: 'Remediation,
standard instruction, enrichment, and assessment
INSTRUCTIONAL TECHNIQUES: Drill and
practice, tutorial

DOCUMENTATION AVAILABLE: In program — prerequisite skills or activities, program operating instructions, teacher's information and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, program operating instructions, teacher's information, follow-up activities, and simple game cards.

INSTRUCTIONAL OBJECTIVES: (STATED) The objectives of this package are to provide young learners (ages 3 to 6) with an opportunity to learn and understand the concepts of above, below, left and right. This package contains ten stated

objectives on page 12 of the manual. All 10 objectives are related to readiness skills.

INSTRUCTIONAL PREREQUISITES: (STATED)
The real prerequisite is that the child have some reading vocabulary, or have an adult or older child help them until the youngster understands what is expected. The words above, below, right and left should be introduced or taught prior to using this package.

CONTENT AND STRUCTURE: The content and structure is a sequential introduction and use of readiness concepts for preschool and primary children. This package does not have a recordkeeping or reporting system. However, a child is allowed to make no more than two mistakes, and the positive reinforcement is excellent.

ESTIMATED STUDENT TIME REQUIRED: The time range would vary greatly depending on the student and the educational setting. For Learning Disabled children, many hours could be spent, while other children would learn the concepts in a few hours.

POTENTIAL USES: This program can be very effectively used in a preschool setting with the general student population. The computer program would also be extremely effective in primary grades with students who as yet do not understand the concepts. It would also be

Continued on back

#### **EVALUATION SUMMARY**

Ā	D	SD NA	·
			Content is accurate.
	$\Box$		Content has educational value.
			Content is free of stereotypes.
•	~.'		Purpose of package is well defined.
•			Package achieves defined purpose.
•			Content presentation is clear and logical.
•			Difficulty level is appropriate to audience.
			Graphics/sound/color are used appropriately.
	·	1.	Use of package is motivational.
	_	•	Student creativity is effectively stimulated.
•	$\vdash$		Feedback is effectively employed.
	•	•	•

SA	Α	D	\$D	ΝÃ	_ <u></u>
	•				Learner controls rate and sequence.
П	•			П	Instruction integrates with prior learning.
•					Learning can be generalized.
П		•		1	User support materials are comprehensive.
П	ē				User support materials are effective.
П	•		i ·		Information displays are effective.
		•	T		Users can operate easily and independently.
П	•		I		Teachers can employ package easily.
•					Computer capabilities are used appropriately.
					Program is reliable in normal use.

SA - Strongly Agree A-Agree DyDisagree SD - Strongly Disagree NA - Not Applicable

The evaluators indicated they would use or recommend use of this package with little or no change.



### Juggles' Rainbow

effective with Learning Disabled students. Juggles' Rainbow can be used for individual instruction, with a small group, or for a large group demonstration.

MAJOR STRENGTHS: The strength of this package is that a scope and sequence of concepts is followed for readiness skills. The color graphics and music contribute to the educational value of the program and provide excellent positive reinforcement. The programs are interactive and a young learner can easily use them independently once he/she has been taught some basic characteristics of the computer and the program. Juggles' Rainbow is an imaginative, creative, educationally sound set of activities which will provide a fun learning experience.

MAJOR WEAKNESSES: The weaknesses of this package are primarily in the support material and the activity cards. The support material is written for a young audience and yet the programs are for reading readiness. An adult would need to read them to the young user. The blue stripes provided with the package did not stay on the computer very well. The activity cards are not very exciting and would not last long in the hands of preshoool children.

OTHER COMMENTS: As a preschool and primary teacher, I would enjoy having this product as part of my curriculum materials. Juggles' Rainbow provides imaginative color graphics to teach what are sometimes difficult concepts. The strengths of these programs far out weigh the weaknesses of the support materials.

# Lessons in Algebra

PRODUCER:

George Earl

1302 General McMullen San Antonio, TX 78237

EVALUATION COMPLETED: March, 1983 by the staff and constituents of Oakland ISD, Pontiac, Michigan.

COST \$29.95

ABILITY LEVEL: Grades 7 through 10 SUBJECT: Mathematics TOPIC: Algebra

MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 48K Apple II, single disk drive, monitor

REQUIRED SOFTWARE: Applesoft, BOS 3.3 or

INSTRUCTIONAL PURPOSE: Standard instruction INSTRUCTIONAL TECHNIQUES: Drill and practice, tutorial

DOCUMENTATION AVAILABLE: In program—student's instructions. In supplementary materials—suggested grade/ability level(s), and program operating instructions.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
To introduce the Elementary Algebra concepts of sets, properties of numbers, exponents, and roots.

CONTENT AND STRUCTURE: Lessons in Algebra is a series of menu-driven learning units that concentrate on Elementary Algebra concepts. Units included are: 1) Sets—Basic Vocabulary; 2) Review of Basic Vocabulary; 3) Postulates—Rules of the Game; 4) Associative and Distributive Laws; 5) Review of Basic Properties; 6, 7, 8) Exponents; and 9) Roots. The program displays material and then checks for understanding by asking true/false or multiple choice questions. Drill and practice exercises and review lessons are provided.

ESTIMATED STUDENT TIME REQUIRED: 10 minutes per option

POTENTIAL USES: The program is suitable for individual use or use by small groups.

MAJOR STRENGTHS: The materials are easily read because of the oversized lettering. One evaluator particularly liked the section on sets. The information is explained well, and the material is presented in a straightforward, simple way. The student answers questions based on the information presented. If the question is missed, the program reviews the presentation and asks the same question again. This set of lessons is well-designed and can be run with no difficulty by the student. The user can control the rate of presentation with a few exceptions (timed loop

Continued on back

#### **EVALUATION SUMMARY**

•	•			Content is accurate.
•				Content has educational value.
	•		7.	Content is free of stereotypes.
	•		1	Purpose of package is well defined.
T	•			Package achieves defined purpose.
一	•			Content presentation is clear and logical.
				Difficulty level is appropriate to audience.
			•	Graphics/sound/color are used appropriately.
$\neg$		•		Use of package is motivational.
_		•	1	Student creativity is effectively stimulated.
•	_			Feedback is effectively employed.

SA	A	D	SD	NA.	
	•				Learner controls rate and sequence.
	•				Instruction integrates with prior learning.
		•			Learning can be generalized.
П		•			User support materials are comprehensive.
				•	User support materials are effective.
	•				Information displays are effective.
	•				Users can operate easily and independently.
	ē		П		Teachers can employ package easily.
П	ē		П	1	Computer capabilities are used appropriately.
$\Box$	-ē			'	Program is reliable in normal use.
	-			_	

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.

Ü



Northwest Regional Educational Laboratory
300 S.W. Sixth Avenue Portland, Oregon 97204
(503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



### Lessons in Algebra

delays for certain explanations). A running percentage is displayed after each question. The program is good for drill and practice to supplement a teacher's instruction.

MAJOR WEAKNESSES: The length of some of the delay loops is sometimes irritating, especially if the user is somewhat familiar with the content. It tends to get boring after a few mirutes, since there is no variation. The same format is used over and over. The only graphics used is the over-sized alphabet which is displayed throughout. Everything is presented in the same way in all of the options. The students who viewed this felt it became boring. These eighth grade students wanted to see a little "flash" in the reinforcement (more graphics possibly). When the program loops back to review a missed question, one evaluator indicated that instead of re-asking the same question, a new question should be asked.

# Math Skills — Elementary

0

PRODUCER: Encyclopedia Britannica Educational Corporation

10th Floor

425 N. Michigan Avenue Chicago, IL 60614

EVALUATION COMPLETED: March, 1983 at the Oakland ISD, Pontiac, Michigan

COST: \$74.00

ABILITY LEVEL: Grades 2 through 6 SUBJECT: Mathematics MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 48K Apple II Plus, single disk drive, monitor REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Standard instruction, remediation INSTRUCTIONAL TECHNIQUES: Drill and practice, tutorial

DOCUMENTATION AVAILABLE: In program student's instructions. In supplementary materials - suggested grade/ability level(s), instructional objectives, prerequisite skills or artivities, program operating instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide practice in mathematic concepts and basic operations.

INSTRUCTIONAL PREREQUISITES: (STATED) The ability to read instructions. Successful completion of one objective is required before attempting the next.

CONTENT AND STRUCTURE: This package provides drill and practice in the areas of number concepts, and the four operations with whole numbers, decimals and fractions.

ESTIMATED STUDENT TIME REQUIRED: 10-30 minutes

POTENTIAL USES: This package is most appropriate for use with individual students to supplement regular classroom instruction in the lower and middle elementary grades. The package could also be used for remedial work.

MAJOR STRENGTHS: The program has good explanations and sequencing of thought patterns. The instructions are clear.

MAJOR WEAKNESSES: You can not change levels. Only the ESC, # and Y or N keys are used. The program is not really motivating. The feedback to the teacher is not useful. The menu vocabulary is difficult for students. The objectives are not clearly stated. Consequently, the teacher would need to spend a few hours determining what this software could do, who should 'se it and how it works.

Continued on back

### **EVALUATION SUMMARY**

SA,	Α.	D	SDNA	<u> </u>
	•		7	Content is accurate.
	€		-	Content has educational value.
•				Content is free of stereotypes.
	●.			Purpose of package is well defined.
•	•			Package achieves defined purpose.
	ē			Content presentation is clear and logical.
	€			Difficulty level is appropriate to audience.
	•			Graphics/sound/color are used appropriately.
-		•		Use of package is motivational.
_	_	-	•	Student creativity is effectively stimulated.
-				Feedback is effectively employed.

SA A D SD NA

			•	Learner controls rate and sequence.
	•			Instruction integrates with prior learning.
		•	Г	Learning can be generalized.
_		•	$\vdash$	. User support materials are comprehensive.
_		•	•	User support materials are effective.
_		ē		Information displays are effective.
_		•	$\vdash$	Users can operate easily and independently.
		•		Teachers can employ package easily.
	_	*	$\vdash$	Computer capabilities are used appropriately
	ē	t –		Program is reliable in normal use.

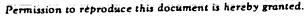
SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated they would not use or recommend use of this package. (See Weaknesses)



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.





# micro SIFT COURSEWARE EVALUATION

Math Skills-Elementary

OTHER COMMENTS: The character set is distracting and could be confusing to young children. "Take away" is not the proper phrase for subtraction. Children who "take away" have a difficult time with written problems in later grades.

# Our Weird and Wacky World/Critical Reading Program: Reading with Critical Understanding

VERSION: No. 2

PRODUCER: Educational Activities

P.O. Box 392

Freeport, NY 11520

EVALUATION COMPLETED: March 1983 by the staff and constituents of Oakland ISD, Pontiac, Michigan.

COST: \$39.95 for disk or \$34.95 for cassette

ABILITY LEVEL: Grades 2 through 5 SUBJECT: Language arts

TOPIC: Critical reading

MEDIUM OF TRANSFER: 5-1/4" flexible disk or

tape cassette

REQUIRED HARDWARE: Apple, or PET with

cassette

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation INSTRUCTIONAL TECHNIQUES: Drill and practice

bocumentation available: In program—student's instructions. In supplementary materials—suggested grade/ability level(s), prerequisite skills or activities, sample program output, program operating instructions, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
To develop critical reading skills by providing practice using the "Cloze" procedure.

INSTRUCTIONAL PREREQUISITES: Third or fourth grade reading level. Other prerequisites are stated in the documentation.

CONTENT AND STRUCTURE: Activities based on eight news stories focus on critical understanding and "Cloze" practice.
Supplementary materials include ditto masters for additional activities.

ESTIMATED STUDENT TIME REQUIRED: 19 -

POTENTIAL USES: The package could be used as individual drill and practice, or with small groups for reading practice.

MAJOR STRENGTHS: Each reading section is short, informative, interesting and based on actual, if unusual, happenings. Students can progress at their own speed with immediate feedback on every response. The eight stories become more difficult as the student progresses. The correct response is given after the student enters three incorrect responses. In the "Cloze" section, the answer is inserted into the text of the story. The use of graphics, although limited, was very good. The package is easy for the student to use and provides a help section if the student encounters trouble. A personal touch is provided by the use of the student's name in a positive manner (i.e., "YOU'RE DOING FINE, (name)."). However, it does tell the student the

Continued on back

#### **EVALUATION SUMMARY**

SA.	. <u>A</u>	D	SD	NA
	•			Content is accurate.
	•			Content has educational value.
	•	Γ.		'Content is free of stereotypes.
_	ē		$\Box$	Purpose of package is well defined.
	•			Package achieves defined purpose.
_	•			Content presentation is clear and logical.
•			1 1	Difficulty level is appropriate to audience.
	_	•	1 1	Graphics/sound/color are used appropriately.
	_	•		Use of package is motivational.
	<del>                                     </del>	•	$\vdash$	Student creativity is effectively stimulated.
-				Feedback is effectively employed.

•				Learner controls rate and sequence.
•	$\vdash$			Instruction integrates with prior learning.
•			1	Learning can be generalized.
$\neg$	•		† †	User support materials are comprehensive.
$\neg \vdash$		•		User support materials are effective.
$\neg$				Information displays are effective.
1.				Users can operate easily and independently.
ē	T	$\vdash$		Teachers can employ package easily.
$\top$	•	\ -	·	Computer capabilities are used appropriately
-	1_			Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicate they would use or recommend use of this package with little or no change.



Our Weird and Wacky World

he/she is doing fine, even if every response is incorrect. The teacher's guide tells exactly what the program does and gives much more information than other similar packages.

MAJOR WEAKNESSES: The directions for the student responses are ambiguous or confusing. Once a story is selected, the student cannot exit the program. All questions are multiple choice and, in some instances, the program allows unlimited guesses. No helpful hints are given for wrong answers. The program goes back to the text and the student must read through an entire passage for which questions have been answered correctly in order to review a section pertaining to the wrong answer.

# Rocky's Boots

VERSION: Apple

PRODUCER: The Learning Company

4370 Alpine Road

Portola Valley, CA 94025

EVALUATION COMPLETED: February, 1983 by the Minnesota Educational Computing Consortium (MECC) in Lauderdale, Minnesota

COST: \$75.00

ABILITY LEVEL: Grades 3 through Adult SUBJECT: Logic, Computer Science, Electronics MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 48K Apple II, single disk drive, color monitor, joystick (optional) REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Enrichment INSTRUCTIONAL TECHNIQUES: Tutorial, game, simulation, problem solving

DOCUMENTATION AVAILABLE: In program—sample program output, program operating instructions, student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, student's instructions, glossary, map of Rocky's Challenge.

INSTRUCTIONAL OBJECTIVES: (STATED) To identify various logic gates and describe their functions. To create simple electronic machines, using wires and gates.

INSTRUCTIONAL PREREQUISITES:
(INFERRED) Familiarity with keyboard and coordination of eye/hand movement to allow precise movement of objects on the screen, using keyboard or joystick. Adequate reading level to comprehend instructions (the reading level is not specified).

content and structure: This package contains a sequence of six colorful graphics programs plus a demonstration program. Four of the programs teach the skills needed to play the two games, one more advanced than the other. In the games the student builds simple, animated machines using wires and logic gates, which select certain targets that score points.

ESTIMATED STUDENT TIME REQUIRED: Four to five days of at least 30 minutes each to do a minimum job on the material

POTENTIAL USES: For use in computer literacy classes; mathematics classes; science units on electricity/electronics; gifted student programs stressing synthesis; creative thinking; and enrichment classes. Modes of use include: individual use, independent of teacher to learn skills; and teams or small groups can use the two games. For related activities: could be tied into formal logic (and, or, not), or Venn diagrams, etc.; could be followed by the construction of real circuits; could illustrate the use of analysis and synthesis in creative thinking.

Continued on back

### **EVALUATION SUMMARY**

SĀ	- Ā-	- <b>D</b> -	SD NA	<u> </u>
ē				Content is accurate.
•				Content has educational value.
	ē			Content is free of stereotypes.
	•			Purpose of package is well defined.
	•			Package achieves defined purpose.
•				Content presentations clear and logical.
	9			Difficulty level is appropriate to audience.
•				Graphics/sound/color are used appropriately.
•				Use of package is motivational.
	· ·	1		Student creativity is effectively stimulated.
	•	7		Feedback is effectively employed.

SA A D SD NA

•			Learner controls rate and sequence.
	0		Instruction integrates with prior learning.
	•		Learning can be generalized.
	•		User support materials are comprehensive.
	•		User support materials are effective.
	•		Information displays are effective.
		1	Users can operate easily and independently.
	•	$\neg$	Teachers can employ package easily.
•			Computer capabilities are used appropriately.
•	-		Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicate they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



### Rocky's Boots

MAJOR STRENGTHS: The package encourages and strengthens analytical, synthetic, and creative thinking skills. It allows and encourages divergent thinking by enabling students to experiment in making machines. The program has a high degree of student control. The movement of graphic elements is precise and movement directions are excellent. The student has many choices and can always change things. The ESC key is used to exit program, to return to the menu, or to the previous screen. Clear, step-by-step instructions are part of each program. It is an exciting use of the computer to simulate electronic circuits. It enables students to have an experience that would be virtually impossible without the computer. It is a highly motivational activity, addictive in the same way video games are to some young people. It is technically excellent; the programs themselves are extremely creative. It uses the capabilities of the Apple II to their fullest. The graphics are extremely diverse and motivating, and the color is very good. The program is useful with a wide range of age levels and includes a wide range of challenges.

MAJOR WEAKNESSES: It is color dependent. The electricity is orange and is not visible on a black and white monitor, making the program impossible to understand on a black and white monitor. It requires a commitment of time and concentration on the part of the student to learn the skills before playing the games. The instructions are long and detailed, but generally clear. It is sometimes difficult to use the knife to cut apart wires, etc. This might prove frustrating to some students. There is a lot for the student to learn. A younger child would have trouble getting through the entire disk. The instructions for the first game are not totally clear from the documentation or screen. The programs sometimes ask questions on the screen without allowing a typed response. (But the student can see the answer by watching the animated objects on the screen.) More support materials for the teacher would be helpful so the program could be more easily incorporated into a logic unit. The explanation pamphlet is helpful but a general background explanation at the beginning would be helpful in getting started.

OTHER COMMENTS: The vocabulary may be a problem for some students (e.g., oscillator). CTRL-G controls the sound being on or off. Because the games start very quickly after the student initiates them, one needs to get into position quickly. It is not possible to pick up two objects which are on top of each other. The package is good for a child who is bright but easily distracted.

According to the producer, new packaging will include an adjusted target audience and a manual containing teacher aids and instructional objectives.

# Checkers

VERSION: 2.1

PRODUCER: Odesta

930 Pitner

Evanston, IL 60202

EVALUATION COMPLETED: April 1983 by the staff and constituents of Lehigh University, Bethlehem, Pennsylvania.

COST: \$49.95

ABILITY LEVEL: Grades 4 through postsecondary. MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 48K Apple II Plus with single disk drive and monitor REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Enrichment INSTRUCTIONAL TECHNIQUES: Game, simulation, problem solving

DOCUMENTATION AVAILABLE: In program program operating instructions. In supplementary materials — sample program output, program operating instructions, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (INFERRED) To increase the user's skills in playing the game of checkers.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Knowledge of the game of checkers.

CONTENT AND STRUCTURE: This program is a computer checker game with 16 levels of difficulty and 23 commands, such as Advice, Demo, Help, Give-Away, and Search.

ESTIMATED STUDENT TIME REQUIRED: One hour per week (as little as 15 minutes per game)

POTENTIAL USES: One or two students can independently play the game. In grades 3-12, successive skill levels can be mastered with a deepening development of thinking and problem solving skills. Higher levels emphasize planning and analyzing several moves in advance. At the high school level, the program parameters can be examined and modified.

MAJOR STRENGTHS: The program is easy to learn and operate (sixth graders successfully ran the program the first time). A wide range of difficulty levels enable wide use across grade levels. Replay of the game is possible. The graphics display is attractive.

MAJOR WEAKNESSES: The instructional manual is not appropriate for the target age/grade range. Additional operating instructions are needed within the program.

OTHER COMMENTS: Most schools do not value the thinking skill development that the game of checkers develops. For those who do, it would be a worthwhile investment.

### **EVALUATION SUMMARY**

SA.A. D.SD.NA

•	Content is accurate.
•	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
0	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately.
•	Use of package is motivational.
	Student creativity is effectively stimulated.
1-1-1	Feedback is effectively employed.

SA A D SD NA

reserves with price learning
stegrates with prior learning.
he generalized.
materials are comprehensive.
materials are effective.
displays are effective.
erate easily and independently.
employ package easily.
pabilities are used appropriately.
liable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

## Chess

VERSION: 7.0

PRODUCER: Odesta

930 Pitner

Evanston, IL 60202

EVALUATION COMPLETED: April, 1983 by the staff and constituents of Lehiga University, Bethlehem, Pennsylvania.

COST: \$69.96

ABILITY LEVEL: Grade 4 through postsecondary MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 48K Apple II Plus with single disk drive and monitor REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL TECHNIQUES: Game, simulation, problem solving

program operating instructions. In supplementary materials — sample program output, program operating instructions, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (INFERRED) To increase the user's skills in chess.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Some knowledge of the game of chess.

content and structure: This is a computer chess package that includes the following features: advice and prediction of best moves, save game to disk, graphic illustration of attacks and defenses, variation of blind-fold chess, 17 levels of play including postal and mate finder mode, enactment of over 30 classic human and computer chess games, and an opening library of over 7,000 moves.

ESTIMATED STUDENT TIME REQUIRED: 10 hours for substantial improvement in skill level

POTENTIAL USES: This package has limited potential for classroom settings. It is a superb package for improving skills in the game of chess. In this way it would stimulate problem solving, thinking, strategy, and planning ahead.

MAJOR STRENGTHS: This is an exemplary program for the strengthening of a complex skill and a good example of artificial intelligence in a microcomputer. Total menu control of the program makes it easily used by anyone (not necessary to flip through manual). The prompting is excellent. Attractive graphics are used.

MAJOR WEAKNESSES: None noted.

OTHER COMMENTS: There is a question of the appropriateness of this package in a classroom setting.

#### **EVALUATION SUMMARY**

SA	Ā	. D	SD	ÑÄ
•		Γ	ГΤ	Content is accurate.
	•			Content has educational value.
•				Content is free of stereotypes.
•			$\Box$	Purpose of package is well defined.
•				Package achieves defined purpose.
	•		1 1	Content presentation is clear and logical.
•		$\vdash$	1 1	Difficulty level is appropriate to audience.
•		Ι.	11	Graphics/sound/color are used appropriately.
_	•	$\vdash$	1	Use of package is motivational:
	•	ŀ	1 1	Student creativity is effectively stimulated.
•		$\vdash$	T	Feedback is effectively employed.

SA. A . D SD NA.

-	•				Learner controls rate and sequence.
				•	Instruction integrates with prior learning.
		•			Learning can be generalized.
,			$\Box$	•	User support materials are comprehensive.
	-		П	•	User support materials are effective,
	•				Information displays are effective.
1		•			Users can operate easily and independently.
		•			Teachers can employ package easily.
	•				Computer capabilities are used appropriately.
	•				Program is reliable in normal use
•					<del> </del>

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



### Clock

PRODUCER: Hartley Courseware, Inc.

P.O. Box 431

Dimondale, Michigan 48821

EVALUATION COMPLETED: April, 1983 by the staff and constituents of North Clackamas School District, Milwaukie, Oregon.

COST: \$39.95

ABILITY LEVEL: Grades 1 through 3
SUBJECT: Mathematics
TOPIC: Time
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple II with one
disk drive, monitor, printer (optional)
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Remediation,
standard instruction, assessment
INSTRUCTIONAL TECHNIQUES: Drill and
practice

DOCUMENTATION AVAILABLE: In supplementary materials — instructional objectives, sample program output, program operating instructions, and teacher's information.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide drill and practice in telling time.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The student must be able to read the prompting messages. The reading level of the messages is not stated.

content and structure: This program gives drill and practice in telling time. The student has three choices: 1) given a diagram of a clock, the student will write digital time to the closest hour, half-hour, quarter-hour, minute. 2) given written expressions of time, the student can demonstrate correct hand positions for hour, half-hour, quarter-hour. 3) given digital time, the student will move the hands of a clock to represent time to nearest hour, half-hour, quarter-hour, five minutes, one minute. The program keeps student records showing incorrect responses.

POTENTIAL USES: This package is most appropriate for use with individual students for standard instruction or remediation. However, it could be used in a demonstration mode with larger groups.

MAJOR STRENGTHS: The package includes recordkeeping of student performance.

MAJOR WEAKNESSES: The rewards are repetitive.

OTHER COMMENTS: This program provides good practice in setting time on a clock.

#### **EVALUATION SUMMARY**

SA	Ä	D	SDI	NA	
	•				Content is accurate.
	ē		$\Box$		Content has educational value.
				•	Content is free of stereotypes.
	•			╗	Purpose of package is well defined.
	ē			$\exists$	Package achieves defined purpose.
	•				Content presentation is clear and logical.
	•	-		コ	Difficulty level is appropriate to audience.
	ē				Graphics/sound/color are used appropriately.
$\Box$	ē			$\neg$	Use of package is motivational.
:		Ι.		•	Student creativity is effectively stimulated.
	•				Feedback is effectively employed.

SA	Α	. D	SD	NA.		
	•				Learner	contr

Learner controls rate and sequence.
Instruction integrates with prior learning.
Léarning can be generalized.
User support materials are comprehensive.
User support materials are effective.
Information displays are effective.
Users can operate easily and independently.
Teachers can employ package easily.
Computer capabilities are used appropriately.
Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Computer Graphing Experiments

VERSION: 1982

PRODUCER:

Addison-Wesley Publishing Company

Sand Hill Road

Menlo Park, CA 94025

EVALUATION COMPLETED: March, 1983 by the Portland Public Schools and Northwest Regional Educational Laboratory, Portland, Oregon.

COST: Three volume series, \$141.00; individual volumes, \$54.00 each
ABILITY LEVEL: Grades 10-12
SUBJECT: Mathematics
TOPIC: Grapning/Algebra and Trigonometry
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 32K Apple II, Apple II Plus, or Apple IIe, single disk drive, monitor
REQUIRED SOFTWARE: Applesoft DOS 3.3
INSTRUCTIONAL PURPOSE: Remediation, standard instruction, enrichment
INSTRUCTIONAL TECHNIQUES: Tutorial and demonstration

DOCUMENTATION AVAILABLE: In program—
suggested grade/ability level(s), program operating
instructions, and student's instructions. In
supplementary materials—suggested grade/ability
level(s), instructional objectives, prerequisite skills or
activities, program operating instructions, teacher's
information, student's instructions, and student worksheets.

INSTRUCTIONAL OBJECTIVES (STATED) To provide a means for the student to quickly see and study the graphs of various elementary functions in secondary mathematics.

INSTRUCTIONAL PREREQUISITES: (STATED) Student must have some textbook experience involving graphing.

CONTENT AND STRUCTURE: The package consists of three volumes. Each volume has about 20 lessons involving every type of coordinate graphing from linear graphs to trigonometric and analytic graphing. The student can visualize how the changing of various coefficients in an equation effect the graph of that equation. This program enhances students understanding of graphing and is intended to go further than a textbook is capable of doing.

ESTIMATED STUDENT TIME REQUIRED: Each of the 63 lessons would take approximately 15-20 minutes for the individual student to complete.

POTENTIAL USES: This is a graphing package for algebra, analytic geometry, and trigonometry. The over sixty different routines will graph the majority of high-school math graphical situations. Instead of one or two graphs of a type, the instructor may show many. Or the student can investigate many individually. Quickness is the key. Parameters can be changed and the result seen right away.

MAJOR STRENGTHS: This package is capable of graphing a wide variety of relations and functions. It also provides the option of superimposing one graph over others enabling the student to study families of graphs. Another strength is its speed. It eliminates the drudgery of graphing.

MAJOR WEAKNESSES: In theory, the graphs of functions and relations like the ones in this package will take the shape of a smooth curve. But, due to the limited resolution of the computer, the graphs appear jagged. It must be brought to the student's attention that the graphs are actually smooth curves. This problem is not the fault of the software but of the hardware.

### **EVALUATION SUMMARY**

SĀ	Ä	D	SDNA	<u> </u>
ē	• (			Content is accurate.
ē				Content has educational value.
•				Content is free of stereotypes.
•				Purpose of package is well defined.
	•			Package achieves defined purpose.
	•			Content presentation is clear and logical.
•				Difficulty level is appropriate to audience.
	•			.Graphics/sound/color are used appropriately.
	•			Use of package is motivational.
	•			Student creativity is effectively stimulated.
	•			Feedback is effectively employed.

SA A D SD NA

Learner controls rate and sequence.
Instruction integrates with prior learning.
Learning can be generalized.
User support materials are comprehensive.
User support materials are effective.
Information displays are effective.
Users can operate easily and independently.
Teachers can employ package easily.
Computer capabilities are used appropriately.
Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

The evaluators indicated they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory
300 S.W. Sixth Avenue • Portland, Oregon 97204
(503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.





# Computer Math Games

VERSION: 1982

PRODUCER:
Addison-Wesley Publishing Company
Sand Hill Road
Menlo Park, CA 94025

EVALUATION COMPLETED: March, 1983 by Portland Public Schools and Northwest Regional Educational Laboratory, Portland, Oregon.

COST: \$324.00 for 7 Volume series. Individual Volumes.1, 2, 3, 4, 6 \$54.00 each, Volume 5 \$39.00, and Volume 7 \$45.00

ABILITY LEVEL: Grades 1 through 9
SUBJECT: Mathematics
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 32K Apple II, Apple II
Plus, or Apple IIe; single disk drive; monitor or
television
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Enrichment,
standard instruction, remediation
INSTRUCTIONAL TECHNIQUES: Drill and
practice, game

program operating instructions, and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program cutput, program operating instructions, teacher's information, student's instructions, and student recordsheets.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide drill and practice in basic arithmetic facts, concepts and computation. The specific objective of each game is stated in the documentation.

INSTRUCTIONAL PREREQUISITES: Students should receive prior instruction on the objective stated for each game. The package itself provides no tutorial.

CONTENT AND STRUCTURE: This package contains 28 different math games, designed for from one to four players in grades 1 through 9. The games reinforce math facts, skill practice and problem solving. Each game provides a way for the teacher to adjust the difficulty level.

ESTIMATED STUDENT TIME REQUIRED: Time is specified in the documentation, and varies for each game.

POTENTIAL USES: This package may be used by individuals or small groups for review, drill, and/or practice. The material is supplemental to regular classroom activities.

MAJOR STRENGTHS: The package is easy to use, and, having a variety of games, motivates the learning of basic math facts and skills.

MAJOR WEAKNESSES: Evaluators reported that no significant weaknesses were encountered.

### **EVALUATION SUMMARY**

SA	A	D.	SDN	'A
•				Content is accurate.
•				Content has educational value.
•				Content is free of stereotypes.
	•	Г		Purpose of package is well defined.
	•			Package achieves defined purpose.
	•			Content presentation is clear and logical.
	•	T	1	Difficulty level is appropriate to audience.
	•		$\Box$	Graphics/sound/color are used appropriately.
•		T		Use of package is motivational.
	•		$\Box$	Student creativity is effectively stimulated.
ë	$\vdash$	$\vdash$		Feedback is effectively employed.

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
	Learning can be generalized.
•	User support materials are comprehensive.
•	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Create Vocabulary

**VERSION: 1981** 

PRODUCER:

Hartley Courseware, Inc.

Box 431

Dimondale, Michigan 48821

EVALUATION COMPLETED: January, 1983 at the Clackamas County ESD, Milwaukie, Oregon.

COST: \$26.95

ABILITY LEVEL: Grades 1 to 10 SUBJECT: Language Arts

MEDIUM OF TRANSFER: 5-1/4" flexible disk,

tape cassette

REQUIRED HARDWARE: Apple II, 48K, cassette control device, cassette player/recorder, 1 disk

drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, standard instruction, assessment

INSTRUCTIONAL TECHNIQUE: Instructional Lineagement, authoring, drill and practice

DOCUMENTATION AVAILABLE: In program—student's instructions. In supplementary materials—program operating instructions, teacher's information.

INSTRUCTIONAL OBJECTIVE: Teacher creates lessons, so would also create objectives.

INSTRUCTIONAL PREREQUISITES: None stated

CONTENT AND STRUCTURE: This program helps teachers build vocabulary drill and practice, and individualized testing. The disk will hold over 50 files of 40 words each and up to 100 vstudent records can be saved on a student file disk.

POTENTIAL USES: This package is most appropriate for use with individual students.

MAJOR STRENGTHS: Allows teacher freedom to select material to fit own needs, and is presented in an easy to use format for the teacher to follow. The unique use of the Cassette Control Device (CCD) is a positive aspect of some of the authoring programs as it gives students both visual and auditory clues.

MAJOR WEAKNESSES: The operating instructions for the computer and the tape player are difficult for very young students. Students would require supervision, although after numerous repetitions of what to do next, they would be able to operate the equipment independently.

OTHER COMMMENTS: There is only one answer acceptable for each stimulus, so vocabulary questions would have to be very specific. Could not allow for meaning which has several synonyms possible.

#### **EVALUATION SUMMARY**

SA A	D SDNA	
	-	Content is accurate.
	•	Content has educational value.
		Content is free of stereotypes.
		Purpose of package is well defined.
	•	Package achieves defined purpose.
	•	Content presentation is clear and logical.
	•	Difficulty level is appropriate to audience.
	•	Graphics/sound/color are used appropriately.
	· _ •	Use of packagé is motivational.
	•	Student creativity is effectively stimulated.
$\top$	1	Feedback is effectively employed.

SA A D SD NA

İ	1	•	Learner controls rate and sequence.
		•	Instruction integrates with prior learning.
		•	Learning can be generalized.
	•		User support materials are comprehensive.
	•		User support materials are effective.
	•		Information displays are effective.
	●		Users can operate easily and independently.
П	•	-	Teachers can employ package easily.
	•		Computer capabilities are used appropriately.
	•		Program is reliable in normal use.
.—			

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewer who are representative of potential users of the courseware package.

Permission to reproduce this document is hereby granted.



# **Discover BASIC**

**VERSION: 1982** 

PRODUCER:

Sterling Swift Publishing Company

1600 Fortview Road Austin, TX 78704

EVALUATION COMPLETED: February, 1983 by the Institute for Educational Research (IER) of Glenn Ellyn, Illinois.

COST: Teachers guide and materials (containing student demo disk and teacher solution disk) \$74.95.) Student workbooks \$5.95 each. Additional student demo disks \$9.95 each.

ABILITY LEVEL: Grade ? through post-secondary SUBJECT: Computer programming

TOPIC: BASIC

MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 32K Apple II Plus, single disk drive, monitor

REQUIRED SOFTWARE: Applesoft BASIC, DOS 3.3 INSTRUCTIONAL PURPOSE: Standard instruction, and enrichment

INSTRUCTIONAL TECHNIQUES: Tutorial, problem solving, and practice of skills on prewritten programs.

DOCUMENTATION AVAILABLE: In program—
instructional objectives. In supplementary materials—
suggested grade/ability level(s), instructional
objectives, prerequisite skills or activities, sample
program output, program operating instructions,
teacher's information, resource/reference information,
student's instructions, student worksheets, textbook
correlation, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED) To develop problem solving skills using BASIC programming as a vehicle.

INSTRUCTIONAL PREREQUISITES: (STATED) Math reasoning at the Algebra I level.

CONTENT AND STRUCTURE: This package provides an introduction to BASIC programming statements and logic through the use of discovery methods. The package presents problems which use statements, and asks "what if" questions requiring students to modify the problems and to apply the concepts. As the student advances, skills and concepts become more difficult. Follow-up assignments are included.

ESTIMATED STUDENT TIME REQUIRED: The package is completely individualized and objective achievement time is entirely relative to each student.

POTENTIAL USES: With an experienced teacher, the package can be used effectively as an instructional course in BASIC and in problem solving thinking skills. The package can be used individually or with small groups of students capable of self-guiding their educational experience.

MAJOR STRENGTHS: All the material is very well organized and thought out. The concepts are presented clearly and completely. The package addresses the issue of using the computer as an individualizing tool which can help students learn the process of problem solving.

MAJOR WEAKNESSES: Most teachers just beginning with BASIC might have to spend extra time in going through the lessons the first time. Successful use of the package requires an individualized setting.

### **EVALUATION SUMMARY**

- - - -

SA	_A	<b>D</b>	SDNA	
. •		ГΤ		Content is accurate.
•				Content has educational value.
			•	Content is free of stereotypes.
•	$\vdash$			Purpose of package is well defined.
•				Package achieves defined purpose.
•	-			Content presentation is clear and logical.
_	•	П	$\neg$	Difficulty level is appropriate to audience.
_	•	1	$\dashv$	Graphics/sound/color are used appropriately:
•	$\vdash$	1	$\neg$	Use of package is motivational.
•	$\vdash$	$\vdash$		Student creativity is effectively stimulated.
Ť	$\vdash$	1 = 1	-	Beedback is effectively employed.

SA A D SD NA

	Ţ	ГΙ	Learner controls rate and sequence.
•			Instruction integrates with prior learning.
		1	Learning can be generalized.
			User support materials are comprehensive.
•	\		User support materials are effective.
	•2		Information displays are effective.
	•		Users can operate easily and independently.
	•		Teachers can employ package easily.
-			Computer capabilities are used appropriately.
•			Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

The evaluators indicated they would highly recommend this package.



Northwest Regional Educational Laboratory . 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewer, who are representative of potential users of the courseware package.



# **Expanded Notation**

VERSION: 3.3

PRODUCER: Hartley Courseware, Inc.

P.O. Box 431

Dimondale, Michigan 48821

EVALUATION COMPLETED: April, 1983 by the staff and constituents of North Clackamas School District, Milwaukie, Oregon.

COST: \$29.95

ABILITY LEVEL: Grades 3 through 5

SUBJECT: Mathematics

MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 48K Apple, single disk

drive, printer (optional)

REQUIRED SOFTWARE: Applesoft, DOS 3.3 or

3.2

INSTRUCTIONAL PURPOSE: Standard instruction, enrichment/lesson, assessment, instructional management, authoring INSTRUCTIONAL TECHNIQUES: Drill and practice, tutorial

DOCUMENTATION AVAILABLE: In program—student's instructions. In supplementary materials—program operating instructions, and teacher's information.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
To provide drill and practice in place value and expanded notation.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The student must have prior instruction on place value and expanded notation.

7 ~

lessons of 20 presentations, each one building on the one before. Review lessons are provided. In most lessons, the student is presented with a numeral written in expanded form, and must type in the correct numeral. If a student misses problems, the computer will list which lesson or lessons the student should work on. Lesson EX20 is recommended as enrichment because of difficulty level. Student recordkeeping is provided with printing option. Teachers can create their own lessons, with a limit of '45 spaces of stimulus and up to 4 correct responses for flexibility.

POTENTIAL USES: The package is most appropriate for use with individual students.

MAJOR STRENGTHS: Instructions are given on the screen, therefore, the package is not teacher directed. The program tells students in what areas more work is needed.

MAJOR WEAKNESSES: None stated.

OTHER COMMENTS: Objectives are loosely implied.

#### **EVALUATION SUMMARY**

SA	A	D	SDNA	
	•			Content is accurate.
	6			Content has educational value.
			•	Content is free of stereotypes.
	•			Purpose of package is well defined.
	Ī			Package achieves defined purpose.
				Content presentation is clear and logical.
				Difficulty level is appropriate to audience.
			•	Graphics/sound/color are used appropriately.
	ē			Use of package is motivational.
		·	•	Student creativity is effectively stimulated.
	•			Feedback is effectively employed.

SA A D SD NA

		Learner controls rate and sequence.
		Instruction integrates with prior learning.
•		Learning can be generalized.
•		User support materials are comprehensive.
•		User support materials are effective.
•		Information displays are effective.
•	1/	Users can operate easily and independently.
•		Teachers can employ package easily.
•	$\top$	Computer capabilities are used appropriately.
· •		Program is reliable in normal use.

Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recomme.

e of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Math Facts/Number and Math Mastery A, B, C, and D

PRODUCER: Colorado Cyphernetics Inc. 3550 Arapahoe #4 Boulder, CO 80303

EVALUATION COMPLETED: March 1983 by the staff and constituents of Lehigh University, Bethlehem, Pennsylvania.

COST: \$75.00

ABILITY LEVEL: Grades 3 through 6
SUBJECT: Mathematics
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: Apple II Plus 48K with
one disk drive, monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Drill and practice

DOCUMENTATION AVAILABLE: In program — prerequisite skills or activities, program operating instructions, pre-test, post-test, student's instructions, and student worksheets. In supplementary materials — instructional objectives, sample program output, teacher's information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED)
Provides supplementary material for individual
practice with the four basic operations with whole
numbers and decimals.

INSTRUCTIONAL PREREQUISITES: No prerequisites, or completion of previous units. The student must be able to read prompting messages.

content and structure: Math Mastery is a set of five diskettes each containing sequential units of study on the four basic operations with whole numbers and decimals. Upon completion of one unit the program recommends the next unit. If the student fails in the drill and practice portion, it shows the correct answer and how the student's work should look.

ESTIMATED STUDENT TIME REQUIRED: 15 to 20 minutes per day over an indefinite period of time depending on the progress through the skill areas.

POTENTIAL USES: The package is most appropriate for use with individual students as drill for specific math skills which have been taught but not mastered.

MAJOR STRENGTHS: The program allows random selection of problems. The teacher is able to program for specific skills. The number of problems per lesson is appropriate. It is easy for the teacher to program and the student to use.

MAJOR WEAKNESSES: The program is not very motivational. The high level skills would require use of some scrap paper and would extend student time on the computer without actually using the computer. The instructions on each disk are not adequate for the user to understand the processes for selecting the program, exiting the old program, or correcting his/her own errors. These errors are present in the "Numbers to English" program: use of hyphen is not allowed: for example, .500 and .00005 are both five hundred thousandths. The use of the comma in a numeral is not accepted.

### **EVALUATION SUMMARY**

•				Content is accurate.
ē	T			Content has educational value.
	T			Content is free of stereotypes.
				Purpose of package is well defined.
	+	$\vdash$		Package achieves defined purpose.
,	†	$\vdash$		Content presentation is clear and logical.
		1		Difficulty level is appropriate to audience.
┿	+-	T	•	Graphics/sound/color are used appropriately
==	•	۲.	$\vdash$	Use of package is motivational.
+	+	Ť	•	Student creativity is effectively stimulated.
1.	,	1	Ť	Feedback is effectively employed.

SA	Ā	D SD NA	
	•		Learner controls rate and sequence.
•			Instruction integrates with prior learning.
	•		Learning can be generalized.
_	•		User support materials are comprehensive.
	•		User support materials are effective.
		•	Information displays are effective.
•	<u> </u>		Users can operate easily and independently.
•	$\vdash$		Teachers can employ package easily.
	•		Computer capabilities are used appropriately.
	•	<del>                                     </del>	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated they would use or recommend use of the package only if certain changes were made (see Major Weaknesses).

21



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

# Multiple Skills

VERSION: 3.3

PRODUCER:

Hartley Courseware, Inc.

P.O. Box 431

Dimondale, Michigan 48821

EVALUATION COMPLETED: April, 1983 by the staff and constituents of North Clackamas School District, Milwaukie, Oregon.

COST: \$92.95

ABILITY LEVEL: Grades 1 through 3
SUBJECT: Language
MEDIUM OF TRANSFER: 5-1/4" flexible disk,
tape cassette
REQUIRED HARDWARE: 48K Apple with single
disk drive, monitor, printer (optional), CCD, tape
recorder/player
REQUIRED SOFTWARE: Applesoft, DOS 3.3 or
3.2
INSTRUCTIONAL PURPOSE: Remediation,
standard instruction, enrichment, instructional
management, authoring
INSTRUCTIONAL TECHNIQUES: Drill and
practice

student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, program operating instructions, and teacher's information.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide drill and practice in root words, affixes, homonyms, compound words, plurals and contractions.

INSTRUCTIONAL PREREQUISITES: None stated.

CONTENT AND STRUCTURE: Given both a visual and auditory stimulus, the student is asked to respond by input from the keyboard. A word list is provided, and the teacher must make a tape of the instructions and words using the cassette control device. Recordkeeping is provided which shows errors made by the student. The package also allows the teacher to create his/her own lessons.

POTENTIAL USES: This package is most appropriate for use with individual students.

MAJOR STRENGTHS: The package is self-pacing and especially good for drill. It involves both auditory and visual stimuli. The ability to create your own lessons, and the student recordkeeping feature are strong points of this package.

MAJOR WEAKNESSES: None stated.

#### **EVALUATION SUMMARY**

SA	A	$\mathbf{D}$	SDN	ia
	•			Content is accurate.
		Г		Content has educational value.
				Content is free of stereotypes.
	•	-		Purpose of package is well defined.
	•		TT	Package achieves defined purpose.
	•			Content presentation is clear and logical.
	•		1	Difficulty level is appropriate to audience.
			1	Graphics/sound/color are used appropriately.
$\vdash$	•	•	1 1	Use of package is motivational.
$\vdash$	•	•		Student creativity is effectively stimulated.
$\vdash$	ě	$\vdash$		Feedback is effectively employed.

	Learner controls rate and sequence.
	Instruction integrates with prior learning.
•	Learning can be generalized.
. •	User support materials are comprehensive.
•	User support materials are effective.
	Information displays are effective.
	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately
1	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Number Words—Level 1

**VERSION: 3.3** 

PRODUCER: Hartley Courseware, Inc.

P.O. Box 431

Dimondale, Michigan 48821

÷.

EVALUATION COMPLETED: April, 1983 by the staff and constituents of North Clackamas School District, Milwaukie, Oregon.

COST: \$26.95

ABILITY LEVEL: Grades 2 through 4
SUBJECT: Mathematics
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple with one
disk drive, monitor, printer (optional)
REQUIRED SOFTWARE: Applesoft, DOS 3.3 or
3.2
INSTRUCTIONAL PURPOSE: Remediation,
standard instruction, instructional management
INSTRUCTIONAL TECHNIQUES: Drill and
practice

DOCUMENTATION AVAILABLE: In program—student's instructions. In supplementary materials—instructionar objectives, program operating instructions, and teacher's information.

INSTRUCTIONAL OBJECTIVES: (STATED)
Given a number written in words, the student will type the numeral.

INSTRUCTIONAL PREREQUISITES:
(INFERRED) The student must have some prior instruction on reading number words. The student must understand the difference between the digit one (1) and letter 1 (L), and between the digit zero (0) and the letter O (0) on the keyboard.

CONTENT AND STRUCTURE: Lessons randomly present 30 number words to students. The student must read the word and correctly type the numeral. The program includes five levels: 1) digits 0-9, 2) number words (0-9), 3) number word (tens and teens), 4) number words (21-59), and 5) number words (51-99).

MAJOR STRENGTHS: Student recordkeeping is a helpful feature of this package.

MAJOR WEAKNESSES: The package does not provide a way of assigning how many problems are given. The operator must know to press the "ESC" key to exit. The graphic rewards are unexciting and predictable. The package gives no instructions on the screen after the initial instructions.

### **EVALUATION SUMMARY**

A	A	D	SDNA	
	•		. [_]	Content is accurate.
$\Box$	•	- 1		Content has educational value.
			•	Content is free of stereotypes.
	•		$\neg$	Purpose of package is well defined.
_	•			Package achieves defined purpose.
_	•			Content presentation is clear and logical.
	•	$\vdash$		Difficulty level is appropriate to audience.
$\neg$	•	•		Graphics/sound/color are used appropriately.
-	•	ē		Use of package is motivational.
	Ť	Н	•	Student creativity is effectively stimulated.
$\dashv$	•			Feedback is effectively employed.

	Learner controls rate and sequence.
	Instruction integrates with prior learning.
	Learning can be generalized.
<del></del>	User support materials are comprehensive.
	User support materials are effective.
<del>                                      </del>	Information displays are effective.
	Users can operate easily and independently.
	Teachers can employ package easily.

Computer capabilities are used appropriately.

Program is reliable in normal use.

SA - Strongly Agree A - Agree D - Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.

SA A D SD NA



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewer who are representative of potential users of the courseware package.



# Number Words—Level 2

VERSION: 3.3

PRODUCER:

Hartley Courseware, Inc.

P.O. Box 431

Dimondale, Michigan 48821

EVALUATION COMPLETED: April, 1983 by the staff and constituents of North Clackamas School District, Milwaukie, Oregon

COST: \$29.95

ABILITY LEVEL: Grades 2 through 5
SUBJECT: Mathematics
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple with one disk
drive, monitor, printer (optional)
REQUIRED SOFTWARE: Applesoft, DOS 3.3 or 3.2
INSTRUCTIONAL PURPOSE: Standard instruction,
assessment, instructional management, authoring
INSTRUCTIONAL TECHNIQUES: Drill and practice

DOCUMENTATION AVAILABLE: In program — pre-test, post-test, and student's instructions. In supplementary materials — instructional objectives, program operating instructions, and teacher's information.

INSTRUCTIONAL OBJECTIVES: (STATED)
Given a number written in words, the student will type the numeral.

INSTRUCTIONAL PREREQUISITES: (INFERRED)
The student must have some prior instruction on reading number words. The student must understand the difference between the digit one (1)

and letter 1 (L), and between the digit zero (0) and the letter O (o) on the keyboard.

contains ten lessons, 20 problems in each, covering numbers from 100 to 1,000,000. In the lessons, the student is presented with a number written in words and the student must type the numeral. Commas are required for numbers above four digits in length. Students are given a pre-test and placed at the correct lesson level. Student recordkeeping is provided showing incorrect response and correct response. A print-out of this file is available. The teacher can also create-a-lesson to fit the needs of students.

POTENTIAL USES: This package is most appropriate for use with individual students.

MAJOR STRENGTHS: Pre-tests and post-tests are available. The package covers a wide range of number word recognition skills. The ability to create your own lessons is a real plus, and student recordkeeping is helpful.

MAJOR WEAKNESSES: A line appears on the screen for the answer, but is not placed where the answer is to be entered.

OTHER COMMENTS: The program asks students how they are doing, but no provision is made for the students to respond.

According to the producer, a more recent version of this program has been released using a different format.

### **EVALUATION SUMMARY**

SA A D SDNA

	$\Box$	Content is accurate.
•		Content has educational value.
		Content is free of stereotypes.
		Purpose of package is well-defined.
•		Package achieves defined purpose.
		Content presentation is clear and logical.
•	$\neg$	Difficulty level is appropriate to audience.
	•	Graphics/sound/color are used appropriately.
		Use of package is motivational.
	•	Student creativity is effectively stimulated.
•		Feedback is effectively employed.

SA A D SD NA

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
<b>→</b>	Learning can be generalized.
•	User support materials are comprehensive.
ē	User support materials are effective.
•	Information displays are effective.
	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately.
	Program is reliable in normal use:

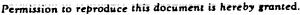
SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory
300 S.W. Sixth Avenue • Portland, Oregon 97204
(503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.





### Odin

PRODUCER: Odesta

930 Pitner

Evanston, IL 60202

EVALUATION COMPLETED: April, 1983 by the staff and constituents of Lehigh University, Bethlehem, Pennsylvania.

COST: \$49.95

ABILITY LEVEL: Grade 4 through postsecondary MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 48K Apple II Plus with single disk drive, monitor and game paddles (optional).

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL TECHNIQUES: Game, simulation, problem solving

DOCUMENTATION AVAILABLE: In program — program operating instructions. In supplementary materials — sample program output, program operating instructions, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (INFERRED) To increase the user's skills at problem solving and game strategy.

CONTENT AND STRUCTURE: Odin is a board game where the object is to entrap your opponents pieces.

ESTIMATED STUDENT TIME REQUIRED: One hour per week (as little as 15 minutes per game).

POTENTIAL USES: The program is useful in developing the skills of problem solving, logical reasoning, and planning ahead.

MAJOR STRENGTHS: The operating instructions are clear and easy to use. There are many options presented clearly. A wide range of difficulty levels are covered (because of the sequential levels of play, no one is likely to outgrow the program). The graphics display is attractive.

MAJOR WEAKNESSES: The package itself displays no major weaknesses.

OTHER COMMENTS: The package is easy to use but challenging! (Previewers noted that they wished that they owned it!) However, there are probably few classroom situations in which skill in a strategic game is valued highly enough to devote substantial time to it.

### **EVALUATION SUMMARY**

SA A D SDNA

Content is accurate.
Content has educational value.
Content is free of stereotypes.
Purpose of package is well defined.
Package achieves defined purpose.
Content presentation is clear and logical.
Difficulty level is appropriate to audience.
Graphics/sound/color are used appropriately.
Use of peckage is motivational.
Student creativity is effectively stimulated.
Feedback is effectively employed.

SA A D SD NA

	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
	Learning can be generalized.
	User support materials are comprehensive.
	User support materials are effective.
•	Information displays are effective.
	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately.
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this puckage.

25



### Our Weird and Wacky World/Literal Comprehension Program: Reading with Understanding

VERSION: No. 1

PRODUCER:

Educational Activities

P.O. Box 392

Freeport, NY 11520

EVALUATION COMPLETED: March 1983 by the staff and constituents of the Oakland ISD, Pontiac, Michigan.

COST: \$39.95 for disk or \$34.95 for cassette

ABILITY LEVEL: Grades 3 through 5
SUBJECT: Language arts
TOPIC: Reading comprehension
MEDIUM OF TRANSFER: 5-1/4" flexible disk or
tape cassette
REQUIRED HARDWARE: Apple, or PET with
cassette
REQUIRED SOFTWARE: Applesoft, DOS 3.3
RNSTRUCTIONAL PURPOSE: Remediation
INSTRUCTIONAL TECHNIQUES: Drill and
practice

DOCUMENTATION AVAILABLE: In program — student's instruction. In supplementary materials — suggested grade/ability level(s), prerequisite skills or activities, sample program output, program operating instructions, student worksheets, follow-up activities.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
To develop reading comprehension skill by
providing practice using the "Cloze" procedure.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Third or fourth grade reading level. Other orerequisites are stated in the documentation.

CONTENT AND STRUCTURE: Activities based on eight news stories focus on word meaning and "Cloze" practice. Supplementary materials include ditto masters for additional activities.

ESTIMATED STUDENT TIME REQUIRED: 10-15 minutes

POTENTIAL USES: The package is useful as individual drill and practice or with small groups for reading practice.

MAJOR STRENGTHS: The stories included in the package have interesting content. The package achieves the purpose of the Cloze procedure.

MAJOR WEAKNESSES: The stories are interesting but the rewards are boring. More graphics would help considerably. Supplementary ditto masters are good but not coordinated with the content of the computer exercises.

OTHER COMMENTS: Although the company suggests use with third and fourth graders, the evaluators suggest second and third graders as the target audience.

#### **EVALUATION SUMMARY**

1			7	Content is accurate.
-				Content has educational value.
•				Content is free of stereotypes.
	-			Purpose of package is well defined.
•		$\Box$		Package achieves defined purpose.
•				Content presentation is clear and logical.
•	1		П	Difficulty level is appropriate to audience.
$\top$			•	Graphics/sound/color are used appropriately.
$\top$	•	i		Use of package is motivational.
	•			Student creativity is effectively stimulated.
1	1 -	İ	П	Feedback is effectively employed.

ŜA	Ä	_ D	SD NA	
	•			Learner controls rate and sequence.
	•			Instruction integrates with prior learning.
	•			Learning can be generalized.
		•		User support materials are comprehensive.
		•		User support materials are effective.
	•	П	1	Information displays are effective.
	•			Users can operate easily and independently.
	ē			Teachers can employ package easily.
	•		##	Computer capabilities are used appropriately.
	•			Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated they would use or recommend use of this package with little or no change.



### **Phonet**

PRODUCER: TIES

1925 W County Road, B-2 Roseville, MN 55113

EVALUATION COMPLETED: Massh 1983 by the staff and constituents of Lehigh University, Bethlehem, Pennsylvania.

COST: \$49.95

ABILITY LEVEL: Grades 1 through 6
SUBJECT: Language arts
MEDIUM OR-TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 32K Apple II Plus with
one disk drive and monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Drill and
practice

program operating instructions, and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, teacher's information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED)
Using prepared phonetic exercises, the student will be able to identify answers to questions given various possible choices. These exercises include drill in sound associations, affixes, syllables, contractions, and homonyms.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The ability to read the prompting messages.

CONTENT AND STRUCTURE: Phonet is a drill and practice program which allows a student to work through a set of prepared phonetic exercises in sound associations, affixes, syllables, contractions, and homonyms.

ESTIMATED STUDENT TIME REQUIRED: One or two sittings with each segment (30 minutes for each lesson).

POTENTIAL USES: Children requiring a review of skills in particular phonic areas would use this program. It covers a wide range of skills.

MAJOR STRENGTHS: The skills are very specific and would enable the teacher to assign practice in skills as appropriate to student needs.

MAJOR WEAKNESSES: There is little to motivate the student. The program is simply a workpage on the computer. In some cases (i.e., long vowels), the vocabulary required is at a higher level than the skill being practiced. If a child could read the vocabulary, he would have already mastered the skill being practiced. Directions both in documentation and in computer presentation could be expanded and clarified.

#### **EVALUATION SUMMARY**

. <b>SA</b>	Ā	D	SD	NΑ	
	•		Π		Content is accurate.
	•				Content has educational value.
	•				Content is free of stereotypes.
	•			$\neg$	Purpose of package is well defined.
$\vdash$	•				Package achieves defined purpose.
Г		0			Content presentation is clear and logical.
$\vdash$		•			Difficulty level is appropriate to audience.
П				•	Graphics/sound/color are used appropriately.
$\vdash$	•		1 1		Use of package is motivational.
$\vdash$			•	╗	Student creativity is effectively stimulated.
	•			$\neg$	Feedback is effectively employed.

SA A DSDNA

●_	Learner controls rate and sequence.
	Instruction integrates with prior learning.
•	Learning can be generalized.
•	User support naterials are comprehensive.
	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
	Teachers can employ package easily.
	Computer capabilities are used appropriately.
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package only if certain changes were made (see Major Weaknesses).



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Prescriptive Math Drill

**VERSION: 3.3** 

PRODUCER: Hartley Courseware, Inc.

P.O. Box 431

Dimondale, Michigan 48821

EVALUATION COMPLETED: April, 1983 by the staff and constituents of North Clackamas School District, Milwaukie, Oregon.

COST: \$79.95

ABILITY LEVEL: Grades 1 through 8
SUBJECT: Mathematics
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple with one disk
drive, monitor, printer (optional)
REQUIRED SOFTWARE: Applesoft, DOS 3.3 or 3.2
INSTRUCTIONAL PURPOSE: Remediation,
standard instruction, assessment, instructional
management
INSTRUCTIONAL TECHNIQUES: Drill and practice

DOCUMENTATION AVAILABLE: In program — student's instructions! In supplementary materials — instructional objectives, program operating instructions, and teacher's information.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide drill and practice in the basic math facts through 99 with the four basic operations. Detailed objectives are stated on page 15 of the manual.

INSTRUCTIONAL PREREQUISITES: The lessons contained in this package are sequential in nature,

and mastery of the material in one lesson is the prerequisite for the next.

CONTENT AND STRUCTURE: The teacher sets the skill level at which each student begins, and the criteria for advancement to the next level. In the lessons, the student is given 20 problems at the first prescribed level. Upon completion of the lesson the computer determines the next lesson for the student based on performance and the prescribed criterion. A record of the student's progress is kept in a file on the disk. The package includes complete file maintenance, which allows the teacher to add, delete, view and change student records; print reports; and check passwords.

MAJOR STRENGTHS: The package incorporates good management capabilities which allow the teacher to set the instructional levelyfor students, change it when necessary, and set the passing percentile. Passwords are required to avoid mix-ups in students and to secure student records.

MAJOR WEAKNESSES: Problems are always presented in horizontal form. For multiplication problems in which a four place response is needed, when the user inputs the correct answer the problem is erased and the answer has to be re-entered. For division problems, the answer is superimposed over the division sign, or appears right next to it and continues over the "=" sign. The teacher is not allowed to input level 100, but the student is asked if he/she would like to do 100's now.

OTHER COMMENTS: According to the producer, this package is currently undergoing revision. The revised program is scheduled for release in September, 1983.

#### **EVALUATION SUMMARY**

CA A D EDNIA

SA.	. А.,	ע	SUNA	
		•		Content is accurate.
	ē			Content has educational value.
			•	Content is free of stereotypes.
	•			Purpose of package is well defined.
_		•		Package achieves defined purpose.
		ē		Content presentation is clear and logical.
	•			Difficulty level is appropriate to audience.
		•		Graphics/sound/color are used appropriately.
			•	Use of package is motivational.
-		ē	1	Student creativity is effectively stimulated.
	•			Feedback is effectively employed.

SA.A	D_	SD	
•			Learner controls rate and sequence.
•			Instruction integrates with prior learning.
•			Learning can be generalized.
•			User support materials are comprehensive.
· •			User support materials are effective.
$\neg$	•		Information displays are effective.
•			Users can operate easily and independently.
•			Teachers can employ package easily:
•			Computer capabilities are used appropriately.
	$\vdash$	•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would not use or recommend use of this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



### Sims

PRODUCER: TIES

1925 W. County Road, B-2 Roseville, MN 55113

EVALUATION COMPLETED: March, 1983 by the staff and constituents of Lehigh University, Bethlehem, Pennsylvania.

COST: \$49.95

ABILITY LEVEL: Grades 1 through & SUBJECT: Language Arts
TOPIC: Spelling
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 32K Apple II Plus,
single disk drive
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Drill and
practice, game

DOCUMENTATION AVAILABLE: In program — program operating instructions and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, teacher's information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED)
Using prepared SIMS word lists, the student will be able to identify and correctly spell words.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The ability to read the prompting messages.

CONTENT AND STRUCTURE: SIMS is a collection of word lists which may be used with four drill and practice exercises: Hangman, Scramble, Spell and Worder. The collection of words is based on the Systematic Instructional Management Strategies Reading Curriculum.

ESTIMATED STUDENT TIME REQUIRED: 30 minutes per session

POTENTIAL USES: SIMS could be used to reinforce previously taught spelling and language arts skills. The program could also be used as a new way of giving drill and practice:

MAJOR STRENGTHS: The graphics are cleverly done and enhance the motivational value of the games. The letters used are large and easily read by younger students. The words chosen are familiar to the students.

MAJOR WEAKNESSES: The categories are not defined anywhere in the documentation, making the program difficult to use. When asking the user to continue, no prompt is given concerning what answer is anticipated. The range of difficulty is too narrow. The learner cannot know why he/she was incorrect at the attempt.

### **EVALUATION SUMMARY**

SĀ	A	D	SD	NA	
	ē		_		Content is accurate.
	•				Content has educational value.
•					Content is free of stereotypes.
	ē				Purpose of package is well defined.
	•				Package achieves defined purpose.
	•				Content presentation is clear and logical.
_	•				Difficulty level is appropriate to audience.
_	ō				Graphics/sound/color are used appropriately.
	•				Use of package is motivational.
	ļ		T		Student creativity is effectively stimulated.
					Feedback is effectively employed.
			_		

SA A			Learner controls rate and sequence.
	<u>,                                     </u>		Instruction integrates with prior learning.
٦,	•		Learning can be generalized.
	9	<u> </u>	User support materials are comprehensive.
	•	1 1 -	User support materials are effective.
$\top$	ē	<del>                                     </del>	Information displays are effective.
$\top$	•		Users can operate easily and independently.
1	•		Teachers can employ package easily.
-+,	<u> </u>	† † †	Computer capabilities are used appropriately.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Program is reliable in normal use.

Evalutors indicated they would use or recommend use of this packge with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



### The Atom

PRODUCER: Micro-Ed, Inc.

P.O. Box 444005

Eden Prairie, MN 55344

EVALUATION COMPLETED: March, 1983 by the staff and constituents of Oakland ISD, Pontiac, Michigan.

COST: \$14.95

ABILITY LEVEL: Grades 6 through 10
SUBJECT: Physical Science/Chemistry
TOPIC: Atomic Structure, Periodic Table
MEDIUM OF TRANSFER: Tape cassette
REQUIRED HARDWARE: PET with cassette
INSTRUCTIONAL PURPOSE: Standard instruction,
remediation
INSTRUCTIONAL TECHNIQUES: Drill and practice,
tutorial

DOCUMENTATION AVAILABLE: In program — program operating instructions and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, and program operating instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide tutorial, and drill and practice on the atomic structure of elements.

INSTRUCTIONAL PREREQUISITES: Prerequisite skills or activities are stated in the documentation.

CONTENT AND STRUCTURE: The program consists of a brief tutorial followed by drill and practice exercises. The student determines the numbers of protons, electrons, neutrons, or the atomic mass of atoms. The program includes the ability to review a lesson.

ESTIMATED STUDENT TIME REQUIRED: 15 minutes

POTENTIAL USES: This is an extremely good review tool for students learning the fundamentals of using the periodic table, and structure of the atom. It is most appropriate for use with individual students.

MAJOR STRENGTHS: The program is simple, clear, and to the point. It achieves its defined purpose. It is easy to run. Users may work at their own pace. There is an excellent student summary at the end of the program. The program provides the options of rule review and lesson review. The computer gives the user the answer, or the user keeps trying until the correct answer is found. There are a variety of feedback responses. The content of the program is basic and accurate, and the presentation is clear and logical. The student can use this program independently, with little or no background knowledge.

MAJOR WEAKNESSES: The program is very "cold"; it does not allow the input of a name, and consequently, does not speak to the user. It is boring (according to students) — sound or interesting graphics are needed. The program has low flexibility; it cannot be used by a wide range of students. It does not have increasing levels of difficulty. The scope is limited to the concept that Atomic Weight is protons plus neutrons. Support materials are limited. The major weakness in this program is its lack of volume of selection of review problems. The same problems are presented in a random order each time, making the program somewhat repetitious. If the program is loaded by title, it will not run. The flashing electrons give the impression that there are a greater number than there should be.

### EVALUATION SUMMARY

EAGO A AS

SA.	. А.	ַע	ישנים פ	MA.	<u> </u>
•					Content is accurate.
	€		$\Box$		Content has educational value.
ē					Content is free of stereotypes.
_	ē	-		T	Purpose of package is well defined.
	ē				Package achieves defined purpose.
	ē			$\equiv$	Content presentation is clear and logical.
	•			_;	Difficulty level is appropriate to audience.
_	•			二	Graphics/sound/color are used appropriately.
_	•				Use of package is motivational.
				•	Student creativity is effectively stimulated.
_	•	1_	1 1	$\neg$	Feedback is effectively employed.
			1 _1		

Learner controls rate and sequence.
 Instruction integrates with prior learning.
 Learning can be generalized.

SA A D SD NA

User support materials are comprehensive.

User support materials are effective.

Information displays are effective.

Users can operate easily and independently.

Teachers can employ package easily.

Computer capabilities are used appropriately.

Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300: S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# The Programmable Cube

PRODUCER: Metacomet Software

P.O. Box 31337 Hartford, CT 06103

EVALUATION COMPLETED: March 1983 by the staff and constituents of Lehigh University, Bethlehem, Pennsylvania.

COST: \$34.95

ABILITY LEVEL: Grades 9 through 12 and postsecondary
SUBJECT: Problem solving
TOPIC: Programming
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple II Plus with one disk drive and color monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Enrichment
INSTRUCTIONAL TECHNIQUES: Problem solving

BOCUMENTATION AVAILABLE: In program—sample program output and program operating instructions. In supplementary materials—sample program output, program operating instructions, student's instructions, and sample program listings.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
To provide an understanding of how to solve cubes, and how to employ structured programming techniques for writing programs to manipulate cubes.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Knowledge of cube solving and cube solving techniques is required.

CONTENT AND STRUCTURE: The Programmable Cube is a specialized, high level programming language designed for solving cubes. It is structured like Pascal but has more of a Logo flavor. The package includes several prewritten programs such as "Solver" and "Patterns" for use by the student. A program editor and debugger are included.

ESTIMATED STUDENT TIME REQUIRED: It would require at least 15 to 20 hours to write solving programs.

POTENTIAL USES: It could be used in a programming course on a limited basis if the course is designed to teach programming. It could be used more effectively outside the programming course.

MAJOR STRENGTHS: Graphics are used appropriately. The support materials are good.

MAJOR WEAKNESSES: No apparent weaknesses noted.

#### **EVALUATION SUMMARY**

SA	Ā	D	SD	NA
	ē		-	Content is accurate.
	ě		T-	Content has educational value.
•				Content is free of stereotypes.
	ē			Purpose of package is well defined.
	•			Package achieves defined purpose.
				Content presentation is clear and logical.
	•		ļ	Difficulty level is appropriate to audience.
ē				Graphics/sound/color are used appropriately.
	•			Use of package is motivational.
	•		┢	Student creativity is effectively stimulated.
				Feedback is effectively employed.

SA.	A	D	SD NA	·
	•			Learner controls rate and sequence.
	•			Instruction integrates with prior learning.
		•		Learning can be generalized.
	•			User support materials are comprehensive.
	•			User support materials are effective.
	•			Information displays are effective.
		•		Users can operate easily and independently.
		•		Teachers can employ package easily.
ė				Computer capabilities are used appropriately
	ē			Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503-248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



### Three Mile Island

PRODUCER: Muse Software

330 N. Charles Street
Baltimore, Maryland 21201

EVALUATION COMPLETED: March, 1983 by the staff and constituents of Oakland ISD, Pontiac, Michigan.

COST: \$39.95

ABILITY LEVEL: Grade 12 and postsecondary SUBJECT: Physical Science TOPIC: Nuclear Reactors MEDIUM OF TRANSFER: 5-1/4" flexible disk REQUIRED HARDWARE: 48K Apple II with single disk drive and color monitor REQUIRED SOFTWARE: Applesoft, DOS 3.3 or 3.2 INSTRUCTIONAL PURPOSE: Enrichment INSTRUCTIONAL TECHNIQUES: Simulation, game

program operating instructions and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, resource/reference information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (INFERRED) To provide a simulation of the operation of a nuclear power plant.

INSTRUCTIONAL PREREQUISITE: (INFERRED)
The student must have some prior instruction on
how a reactor works.

CONTENT AND STRUCTURE: This program is a simulation of the operation of a nuclear reactor. Graphic screens show portions of a nuclear reactor

as the student simulates the conditions of running a plant. A lengthy support booklet is included.

ESTIMATED STUDENT TIME REQUIRED: 15 minutes to one hour

POTENTIAL USES: The package could be used as a classroom demonstration, for individual enrichment experience, or with small groups.

MAJOR STRENGTHS: Three-Mile Island is a realistic simulation of the operation of a nuclear reactor, a very timely and interesting topic. The package is very comprehensive and covers the topic very thoroughly. It is easy to use, and the graphics and technical displays are excellent. The operation of the program is fairly complete as it needs to accurately simulate the reactor operation. The program is challenging enough not to be boring and uses graphics fairly well to let the user manipulate the operation of the reactor. It can be "fun" while students realize the complexities of the undertaking.

MAJOR WEAKNESSES: Too much time is required to prepare for using the program. It is difficult to use in large group applications. The program is suitable only for advanced high school students. There is a 35-page instruction manual as the only documentation. It took one evaluator about four hours to BEGIN to understand what should be done, and the evaluator never advanced to the point that "melt down" could be avoided. The preparation time to have a class of students use this program would be extensive even with student information sheets being prepared in the DISC workshop. It also moves very fast. It would be more effective if you could choose speeds to allow a longer time to learn. Even with manual set up, the computer timing does not change.

### **EVALUATION SUMMARY**

SA	. А	. <u>D</u>	.SD.NA	
•				Content is accurate.
•				Content has educational value.
•			· 1	Content is free of stereotypes.
•				Purpose of package is well defined.
ē				Package achieves defined purpose.
ē				Content presentation is clear and logical.
		9		Difficulty level is appropriate to audience.
•				Graphics/sound/color are used appropriately:
	•			Use of package is motivational.
	. ●	_		Student creativity is effectively stimulated.
	<u> </u>	ē	<b> </b>	Feedback is effectively employed.

Northwest Regional Educational Laboratory

		•			Learner controls rate and sequence.
		•			Instruction integrates with prior learning.
	•				Learning can be generalized.
	•				User support materials are comprehensive.
•	<u>                                     </u>			1 1	User support materials are effective.
•			١.		Information displays are effective.
				•	Users can operate easily and independently.
		•			Teachers can employ package easily.
	•				Computer capabilities are used appropriately.
			7		Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated they would use or recommend use of this package with little or no change.





### Vowels

VERSION: 3.3

PRODUCER.

Hartley Courseware, Inc.

P.O. Box 431

Dimondale, Michigan 48821

EVALUATION COMPLETED: April, 1983 by the staff and constituents of North Clackamas School District, Milwaukie, Oregon

COST: \$93.95

ABILITY LEVEL: Grades 2 through 3 SUBJECT: Language Arts

TOPIC: Vowels

MEDIUM OF TRANSFER: 5-1/4" flexible disk,

ape cassette

REQUIRED HARDWARE: 48K Apple with one disk drive, monitor, printer (optional), CCD, tape recorder/player

REQUIRED SOFTWARE: Applesoft, DOS 3.3 or

3.2

INSTRUCTIONAL PURPOSE: Remediation, standard instruction, assessment, instructional management, authoring

INSTRUCTIONAL TECHNIQUES: Drill and

practice

DOCUMENTATION AVAILABLE: In program—student's instructions. In supplementary materials—suggested grade/ability level, program operating instructions, and teacher's information.

INSTRUCTIONAL OBJECTIVES: (INFERRED)

INSTRUCTIONAL PREREQUISITES: None stated.

content and structure: There are 53 lessons of 20 presentations each, covering different vowel sounds. The teacher records the instructions on tape with the use of the cassette control device (CCD). The student is presented with a visual stimulus, listens to an auditory stimulus, and then enters his/her response on the keyboard. Programs keep track of up to 100 students and will make a print-out of each student's progress. The teacher can create his/her own lessons using the create feature.

POTENTIAL USES: This package is most appropriate for use with individual students.

MAJOR STRENGTHS: The package covers a lot of variations in vowel sounds. The ability to create your own lessons and the student recordkeeping feature are strong points of this package.

MAJOR WEAKNESSES: None stated.

### **EVALUATION SUMMARY**

SA A D SDNA

		Content is accurate.
		Content has educational value.
	•	Content is free of stereotypes.
•		Purpose of package is well defined.
•		Package achieves defined purpose.
		Content presentation is clear and logical.
•		Difficulty level is appropriate to audience.
	•	Graphics/sound/color/are used appropriately.
		Use of package is motivational.
-+-	•	Student creativity is effectively stimulated.
		Feedback is effectively employed.

SA A D SD NA

	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
	Learning can be generalized.
1.	User support materials are comprehensive.
•	User support materials are effective.
-	Information displays are effective.
1.	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately.
	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package only if certain changes were made (see Major Weaknesses).



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are resentative of potential users of the courseware package.



# Who, What, Where, When

VERSION: 3.3

PRODUCER: Hartley Courseware, Inc.

P.O. Box 431

Dimondale, Michigan 48821

EVALUATION COMPLETED: April, 1983 by the staff and constituents of North Clackamas School District, Milwaukie, Oregon.

COST: \$35.95

ABILITY LEVEL: Grades 1 through 6
SUBJECT: Language Arts
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple with disk
drive, monitor, printer (optional)
REQUIRED SOFTWARE: Applesoft, DOS 3.3 or
3.2

INSTRUCTIONAL PURPOSE: Standard : instruction, instructional management, authoring INSTRUCTIONAL TECHNIQUES: Drill and practice

DOCUMENTATION AVAILABLE: In program—student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, program operating instructions, teacher's information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (INFERRED) To identify whether a given statement tells who, what, where, when or why.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Students would have to have some prior understanding of the topic as no explanation is given.

content and structure: Given phrases, student will determine if it is a who, what, where, when, why statement. At lower levels, only two of these are used at any one time. Student recordkeeping available with optional print-out. The package also provides a way to create and modify your own lessons.

POTENTIAL USES: This package is most appropriate for use with individual students.

MAJOR STRENGTHS: There are not many programs available which drill on this particular topic. Leveled well — not too much is expected for lower levels.

MAJOR WEAKNESSES: No explanation of topic is given. Student would have to have some understanding of topic. Student feedback is repetitive.

OTHER COMMENTS: According to the producer, a more recent version has been released that gives an instruction frame and remedial feedback on missed items.

### EVALUATION SUMMARY

SA	Α	D	SDN	A
	•			Content is accurate.
•				Content has educational value.
	ē			Content is free of stereotypes.
	•			Purpose of package is well defined.
	- 6			Package achieves defined purpose.
_	•			Content presentation is clear and logical.
	ē			Difficulty level is appropriate to audience.
_		<u> </u>	1	Graphics/sound/color are used appropriately.
	•			Use of package is motivational.
_				Student creativity is effectively stimulated.
	·			Feedback is effectively employed.
	1			

SA A D SD	NA
<b>-</b>	Learner controls rate and sequence.
	Instruction integrates with prior learning.
	Learning can be generalized.
•	User support materials are comprehensive.
-	User support materials are effective.
	Information displays are effective
	Users can operate easily and independently.
	Teachers can employ package casily.
•	Computer capabilities are used appropriately.
	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewer who are representative of potential users of the courseware package.



# Computer Math Activities Volume 3

VERSION: Apple

PRODUCER:
Addison-Wesley Publishing Company
School Division
Sand Hill Road
Menlo Park, CA 94025

EVALUATION COMPLETED: May, 1983 by the staff and constituents of the Region X ISC, Richardson, Texas.

COST: \$15.00

ABILITY LEVEL: Grades 1 through 9
SUBJECT: Mathematics
TOPIC: Arithmetic
MEDIUM OF TRANSFER: 5-1/4 in. flexible disk
REQUIRED HARDWARE: 32K Apple II, single
disk drive, monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard
instruction.
INSTRUCTIONAL TECHNIQUES: Drill and
practice, game

program operating instructions, and student's instructions. In supplementary materials suggested grade/ability level(s), instructional objectives, prerequisite skills or activitie, sample program output, program operating instructions, teacher's information, student's instructions, and student worksheets.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide timed practice adding, subtracting, multiplying or dividing whole numbers, decimals, or integers. To provide practice recognizing number patterns, place-value, and logic skills. To develop problem solving skills.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The student must have obtained the skills used in the game to successfully participate.

CONTENT AND STRUCTURE: This package is made up of six math games. TREASURE HUNT is a timed practice adding, subtracting, multiplying, or dividing whole numbers, decimals, or integers (for 1-5 players/teams). BUZZ provides practice in recognition of number patterns including multiples of selected whole numbers within a pattern (for 1-8 players/teams). ONCE AROUND provides practice adding, subtracting, multiplying, or dividing whole numbers, decimals or integers (for 1-4 players/teams). SEGMENTS AND TRIANGLES involves developing problem solving strategies and using line segments to construct triangles (for 2 players/teams). SPINO provides practice adding and multiplying whole numbers to three digits and supplying missing addends and multiplicands (for 1-5 players/teams). UNLOCK IT provides practice developing place-value understanding and logic skills using 2, 3, and 4-digit numbers (for 1 player/team).

Continued on back

### EVALUATION SUMMARY

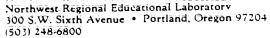
•	Content is accurate.
•	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
- I	Graphics/sound/color are used appropriately
•	Use of package is motivational.
•	Student creativity is effectively stimulated
	Feedback is effectively employed:

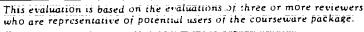
ē			$\neg \neg$	Learner controls rate and sequence
	•			Instruction integrates with prior learning.
•		$\Box$		Learning can be generalized.
ē		-		User support materials are comprehensive.
ē				User support materials are effective.
ē	_			Information displays are effective.
ē				Users can operate easily and independently.
•				Teachers can employ package easily.
•				Computer capabilities are used appropriately
•	_	$\Box$		Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.









# SIFT COURSEWARE EVALUATION

Computer Math Activities, Volume 3

ESTIMATED STUDENT TIME REQUIRED: Varies by activity from several minutes to half an hour.

POTENTIAL USES: The program may be used in a classroom setting to provide drill and practice in basic arithmetic operations. The package can be used by individual students or teams of students.

MAJOR STRENGTHS: The game format offers an incentive for students needing drill and practice in basic arithmetic operations.

MAJOR WEAKNESSES: None stated.

OTHER COMMENTS: The time for drawing of the maze in the TREASURE HUNT program could be shortened.

## Mixed Numbers

VERSION: 1982

PRODUCER:

Milton Bradley Education Division

443 Shaker Road

East Longmeadow, MA 91028

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$44.95

ABILITY LEVEL: Grades 5 through 9

SUBJECT: Mathematics

TOPIC: Mixed numbers, fractions

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48k Apple II+, single

disk drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, standard instruction, instructional management INSTRUCTIONAL TECHNIQUES: Drill and practice, tutorial, problem solving

DOCUMENTATION AVAILABLE: In program—teacher's information and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, program operating instructions, pre-test, post-test, teacher's information, student worksheets.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
To reinforce and provide drill and practice with
mixed numbers.

INSTRUCTIONAL PREREQUISITES:

(INFERRED) Students will need initial instruction in operations involving mixed numbers.

CONTENT AND STRUCTURE: On the basis of a written pretest (included in the packet), each student is assigned one of three modes (M, I, or P) for each skill. These assignments are stored on the diskette and are used by the computer to control the type of instruction to be given to each student. In the practice mode (P) students work through problems on paper before entering their answers into the computer.

After two tries, the program helps the student work through the problem step-by-step, or the student can use "H" to request help at anytime. Since the Mastery Quiz is a mode (M), only one try is given and no help is available, only the correct answer. After passing the quiz, the student is sent to another skill. In the instruction mode (I), students are automatically taken step-by-step through the program as they are when they press "H" in the practice mode. Students pass from the instruction mode to the practice mode, or the practice mode to the mastery mode by meeting the criteria the teacher sets in the student manager. Worksheets, as well as pre- and post-tests are provided in the package. Class and student record sheets are also provided on which to record specific scores.

ESTIMATED STUDENT TIME REQUIRED: 20 to 30 minutes per lesson.

Continued on back

### **EVALUATION SUMMARY**

.SA. A . D .SD NA.

•	Confert is accurate.
•	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined-purpose.
9	Content presentation is clear and logical:
•	Difficulty level is appropriate to audience.
2	Graphics/sound/color are used appropriately.
-	Use of package is motivational.

SA A	D SD NA	
•		Learner controls rate and sequence.
•		Instruction integrates with prior learning.
		Learning can be generalized.
•		User support materials are comprehensive.
•		User support materials are effective.
•		Information displays are effective.
•		Users can operate easily and independently.
•		Teachers can employ package easily.
		Computer capabilities are used appropriately.
•		Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.

Student creativity is effectively srimulated.

Feedback is effectively employed.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland. Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.





Mixed Numbers, continued

POTENTIAL USES: This is excellent drill and practice for review and skill maintenance.

There may also be an application for estimating approximate answers. This package could also be used at the instruction level for the entire class as part of their initial instruction.

MAJOR STRENGTHS: Excellent management system, worksheets and student records. The program contains all operations with mixed numbers. The student must obtain mastery of one skill before the computer allows him to go to another skill. Excellent feedback and helpful examples throughout the program. The price is very reasonable and the screen displays are appealing and readable.

MAJOR WEAKNESSES: Although we read numbers from left to right, students should never have to type whole number answers from left to right (even when worked on their paper first). All +, -, and X begins with ones place and so should the typed-in answers. This program may be too difficult for remedial students because lots of prerequisite skills are provided.

OTHER COMMENTS: This program is well worth its price. Students will not dread practice of fractions when it can be done in this manner and help can be given immediately by the computer instead of waiting for the teacher.

# Dragon Mix

VERSION: 1982

PRODUCER:

DLM, Inc.

P.O. Box 4000 Allen, TX 75002

EVALUATION COMPLETED: May 1983 by the staff and constituents of TIES, Roseville, Minnesota

COST: \$39.00 for Apple, \$44.00 for TI 99/4A

ABILITY LEVEL: Grades 3 through 7
SUBJECT: Mathematics
TOPIC: Multiplication and Division .
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: 48K Apple II or Apple
IIe, disk drive, monitor (preferrably color), game
paddles (optional)
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard
instruction, remediation
INSTRUCTIONAL TECHNIQUES: Drill and
practice, game

DOCUMENTATION AVAILABLE: Suggested grade/ability level(s), instructional objectives, program operating instructions, teacher's information, student's instructions, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: Following extensive drill with materials in this package, the student will be able to: correctly write or say

answers to basic fact problems in package at a rate of 40 to 90 per minute with 100% accuracy; correctly compute basic facts included in the program within individual problems involving more complex processes; and correctly answer basic facts included in the program in applied situations such as making change, determining distances.

INSTRUCTIONAL PREREQUISITES: The program assumes that the student has been introduced to multiplication and division facts in the program prior to use.

consists of one disk in a hard plastic folder, a teacher's guide, worksheet and progress chart masters, and a set of flashcards in a box. The record keeping is not on the disk, but rather in the form of progress charts. The program is drill and practice for multiplication and division facts 0-9. Students are involved in a game in which a dragon defends a city from attacking spacecraft. The level of difficulty and the time allowed are controlled by the teacher. At the end of each game, the hits and misses are reported. This information is then recorded by the student on a progress chart.

ESTIMATED STUDENT TIME REQUIRED: A student would need at least five to ten minutes per day over a period of several weeks to meet the objectives.

Continued on back

## **EVALUATION SUMMARY**

ŜΑ	À	D	SD NA	<u> </u>
•				Content is accurate.
•	i I			Content has educational value.
•	l			Content is free of stereotypes.
•				Purpose of package is well defined.
•		i	-	Package achieves defined purpose.
	•	ī		Content presentation is clear and logical.
_	٠			Difficulty level is appropriate to audience.
•			-	Graphics/sound/color are used appropriately
ē				Use of package is motivational.
_		Ē		Student creativity is effectively stimulated.
		i	1 1	Feedback is effectively employed.

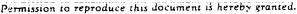
		L	 Learner controls rate and sequence.
			 Instruction integrates with prior learning.
	ė		Learning can be generalized.
-		•	User support materials are comprehensive.
		•	User support materials are effective.
•			Information displays are effective.
	•		Users can operate easily and independently.
•	· ·		Teachers can employ package easily.
	•		Computer capabilities are used appropriately
•			Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



## Dragon Mix, continued

POTENTIAL USES: The package could be effectively used by individual students in a classroom for drill and practice on division and multiplication facts. If competition between students is desired, a race can be instigated by using more than one computer.

MAJOR STRENGTHS: The game format is highly motivational. Graphics and sound are very effective. The student record keeping can be motivational, as well as a learning experience in graphs. With teacher control of content and timing, the game is not easily mastered so there is a challenge for high achievers, as well as low

MAJOR WEAKNESSES: The game takes a long time to boot. The teacher guide and supplementary materials are not very helpful.

40

# Computer Math Activities Volume 1

VERSION: Apple

PRODUCER:
Addison-Wesley Publishing Company
School Division
Sand Hill Road
Menlo Park, CA 94025

EVALUATION COMPLETED: April, 1983 by the staff and constituents of the Alaska Department of Education, Juneau, Alaska.

COST: \$15.00 per volume

ABILITY LEVEL: Grades 1 through 9 SUBJECT: Mathematics

TOPIC: Arithmetic

MEDIUM OF TRANSFER: 5-1/4 in. flexible disk REQUIRED HARDWARE: 32K Apple, single disk drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Standard instruction INSTRUCTIONAL TECHNIQUES: Drill and practice, game

program operating instructions, and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, student's instructions, and student worksheets.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide practice adding, subtracting, multiplying and dividing whole numbers, decimals or integers. To provide practice ordering numbers, writing math sentences, and estimating lengths in centimeters.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The student must have obtained the skills used in the game to be a successful participant.

CONTENT AND STRUCTURE: This package is made up of 5 math games: SKI MATH, a timed practice adding, subtracting, multiplying or dividing whole numbers, decimals, or integers (2 players/teams); HEX GAME, provides practice adding, subtracting, multiplying or dividing whole numbers, decimals, or integers (2 players/teams); LINE 'EM UP, a timed practice arranging a set of numbers from smallest to largest (2 players/teams); FIND IT, provides practice writing mathematical sentences using only numbers 1 through 13 and any combination of addition, subtraction, multiplication or division (1 player/team); and METRIC 21, provides practice estimating (or measuring) centimeter lengths and adding them for sums through 21 (1-3 players/teams).

ESTIMATED STUDENT TIME REQUIRED: Varies by activity from several minutes to half an hour.

Continued on back

SA A DSDNA

## **EVALUATION SUMMARY**

•	Content is accurate.
• 1	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
•	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately
•	Use of package is motivational.
•	Student creativity is effectively stimulated.
•	Feedback is effectively employed.

	•		Learner controls rate and sequence.
	•	 - 1	Instruction integrates with prior learning.
•	0		Learning can be generalized.
•			User support materials are comprehensive.
•	•		User support materials are effective.
•			Information displays are effective.
ē		 	Users can operate easily and independently.
ē			Teachers can employ package easily:
	ē		Computer capabilities are used appropriately
ē			Program is reliable in normal use:

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 . This evaluation is based on the evaluations of three or more reviewers who are representative of potential users—the courseware package.

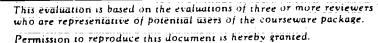


Computer Math Activities, Volume 1

POTENTIAL USES: The activities can be performed individually, or players and teams can compete. Several of the activities could be used with first and second graders. These math activities could be used to supplement instruction, to provide additional practice in basic math skills, and to increase student motivation.

MAJOR STRENGTHS: The directions are clear and the activities are motivational. The level of student or teacher control is high. Some games include a list of twelve options: addition, subtraction, multiplication, and division of whole numbers, decimals and integers. The user also selects the minimum and maximum values of numbers to be used. By setting these parameters at the beginning of each activity, the student or teacher can regulate the math difficulty level. A backup diskette and student record forms are included in the package. The computer summarizes scores at the end of each activity.

MAJOR WEAKNESSES: in LINE 'EM UP, the object is to arrange a set of numbers from smallest to largest before time expires. However, the same number may be repeated in a sequence, which is confusing to students.



# Computer Math Activities Volume 2

VERSION: Apple

PRODUCER:
Addison-Wesley Publishing Company
School Division
Sand Hill Road
Menlo Park, CA 94025

EVALUATION COMPLETED: April, 1983 by the staff and constituents of the Alaska Department of Education, Juneau, Alaska.

COST: \$15.00 per volume

ABILITY LEVEL: Grades 1 through 9
SUBJECT: Mathematics
TOPIC: Arithmetic
MEDIUM OF TRANSFER: 5-1/4 in. flexible disk
REQUIRED HARDWARE: 32K Apple, single disk
drive, monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Drill and

DOCUMENTATION AVAILABLE: In program program operating instructions, and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, student's instructions, and student worksheets.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide timed practice in addition, subtraction, multiplication and division with whole numbers, decimals or integers. To provide practice writing math sentences, recognizing operation signs, identifying polygons, understanding fractions and solving rebus problems.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The student must have obtained the skills used in the game to be a successful participant.

CONTENT AND STRUCTURE: This package is made up of 5 math games: DINOSAUR MATH, a timed practice adding, subtracting, multiplying or dividing whole numbers, decimals, or integers (1-4 players/teams); SURROUND 'EM, a timed practice using 2 or 3 numbers to write math sentences in addition, subtraction, multiplication and division (2-5 players/teams); MATH GALLERY, a timed practice adding, subtracting, multiplying or dividing whole numbers, decimals, or integers (1-5 players/teams); MATH MEMORY, provides basic math practice in addition, subtraction, multiplication, or division, and recognition of the mathematical signs involving these operations (1-2 players/teams); and MATH MEMORY 2, provides practice identifying polygons, understanding fractions, and solving rebus problems (1-2 players/teams).

Continued on back

SA A D SD NA

### **EVALUATION SUMMARY**

practice, game

SA	Ā	D	SD	NĀ	<u>_</u> · · · <del> i · · · · i · · · · · · · · · · · · · · · · · ·</del>
ē					Content is accurate.
•					Content has educational value.
					Content is free of stereorypes.
	٠				Purpose of package is well defined.
	•				Package achieves defined purpose.
•					Content presentation is clear and logical.
•					Difficulty level is appropriate to audience.
•					Graphics/sound/color are used appropriately.
•					Use of package is motivational.
	•				Student creativity is effectively stimulated.
•					Feedback is effectively employed.

•	Learner controls rate and sequence.
1.1	Instruction integrates with prior learning.
•	Learning can be generalized.
•	User support materials are comprehensive.
•	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
	Ceachers can employ package castry.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Program is reliable in normal use.

Computer capabilities are used appropriately.

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue Portland. Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.





Computer Math Activities, Volume 2

ESTIMATED STUDENT TIME REQUIRED: Varies by activity from several minutes to half an hour.

POTENTIAL USES: The activities can be performed individually, or players and teams can compete. Several of the activities could be used with first and second graders. These math activities could be used to supplement instruction, to provide additional practice in basic math skills, and to increase student motivation.

MAJOR STRENGTHS: The directions are clear and the activities are motivational. The level of student or teacher control is high. Some games include a list of twelve options: addition, subtraction, multiplication, and division of whole numbers, decimals and integers. The user also selects the minimum and maximum values of numbers to be used. By setting these parameters at the beginning of each activity, the student or teacher can regulate the math difficulty level. A backup diskette and student record forms are included in the package. The computer summarizes scores at the end of each activity.

MAJOR WEAKNESSES: DINOSAUR MATH recycles slowly. After capturing a dinosaur, the student must re-enter all parameters in order to do the activity again.

# Wordwright

VERSION: 1983

PRODUCER:

Encyclopedia Britannica Educational Corporation

10th Floor

425 N. Michigan Avenue

Chicago, IL 60611

EVALUATION COMPLETED: June 1983 by the staff and constituents of PREPS, Mississippi State University.

COST: \$299.00

ABILITY\_LEVEL: Grades 4 through 12

SUBJECT: Language Arts

TOPIC: Vocabulary

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II, single

disk drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3

INSTRUCTIONAL PURPOSE: Standard

instruction, enrichment

INSTRUCTIONAL TECHNIQUES: Authoring,

drill and practice, game

pre-test, and post-test. In supplementary materials — sample program output, program operating instructions, teacher's information, student's instructions, student worksheets.

INSTRUCTIONAL OBJECTIVES: (STATED) To strengthen vocabulary in various subject areas through instructional games.

INSTRUCTIONAL PREREQUISITES:
(INFERRED) Students should have prior instruction on the words in any given word list.

CONTENT AND STRUCTURE: Wordwright is a set of three game disks and five dictionary disks. The games included are: Game 1, Fragmentation - a game of correctly connecting root words with suffix or prefix to form a word; Game 2, Crossword — a game similar to a crossword puzzle; and Game 3, Wordsearch - a game of finding hidden scrambled words among a random selection of letters. The game diskettes are used with one of the five available dictionary diskettes, each containing 25 lists of ten words a total of 250 words on each diskette. Clues for all three games are context-based and take the form of definitions, etymology, word usage, sample sentences, and number of letters/syllables in the missing word. Each game disk contains: 1) a program generated pre-test and post-test; 2) multiple-choice vocabulary exercises; 3) the game program for that disk; 4) word sets that allow you to play the game; and 5) a program to allow you to create your own word sets to be used by the game.

ESTIMATED STUDENT TIME REQUIRED: Evaluator did not indicate — did not use the program with students.

POTENTIAL USES: Vocabulary development and language enrichment.

Continued on back

### **EVALUATION SUMMARY**

CT T D CDNY

SA	Α.	D.	SD	NA.	· · · —
	ē	_			Content is accurate.
	ē			i	Content has educational value.
	ē				Content is free of stereotypes.
	•	•			Purpose of package is well defined.
			i	•	Package achieves defined purpose.
		•			Content presentation is clear and logical.
		ě			Difficulty level is appropriate to audience.
	•		•		Graphics/sound/color are used appropriately.
				•	Use of package is motivational.
		•			Student creativity is effectively stimulated.
_	•			ìП	Feedback is effectively employed.

.SA. A . D .SD .NA.

Γ	•			Learner controls rate and sequence.
Г	Ì		•	Instruction integrates with prior learning.
Г	•			Learning can be generalized.
-		•		User support materials are comprehensive.
Г	1	•		User support materials are effective.
	•			Information displays are effective.
		•		Users can operate easily and independently.
		•		Teachers can employ package easily.
	•			Computer capabilities are used appropriately.
	•	İ		Program is reliable in normal use.
$\overline{}$				<del></del>

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory \_\_\_\_\_ 300 S.W. Sixth Avenue • Portland. Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



## Wordwright, continued

MAJOR STRENGTHS: The exercises are good. The context use, the history and examples are excellent. Evaluators liked the basic plan (pretest/posttest/exercises/game). Evaluators also liked the file maker option.

MAJOR WEAKNESSES: Pretest — junior high words — skipped name; skimpy directions. Game disks operate very slowly! This entire package is tough to "get into" because of its complexity. One evaluator feels the games are overly complicated; relative to understanding how best to use them.

OTHER COMMENTS: As with any instructional package, the evaluators feel it is imperative to know if it has been fieldtested and whether or not students do learn from it. Also, do students like it? Although these games seem dull and boring to some adults, students may find them fascinating.

# **Elementary Math**

VERSION: 1982

PRODUCER: TIES

1925 W. County Road B-2 Roseville, MN 55113

EVALUATION COMPLETED: June 1983 by the staff and constituents of PREPS, Mississippi State, Mississippi.

COST: \$49.95

ABILITY LEVEL: Grades 4 through 6
SUBJECT: Mathematics
TOPIC: Logic, Measurement, Arithmetic
MEDIUM OF TRANSFER: 5-1/4 in. flexible disk
REQUIRED HARDWARE: 32K Apple II+, single
disk drive, monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Supplementary
INSTRUCTIONAL TECHNIQUES: Drill and
practice, game

DOCUMENTATION AVAILABLE: In program — program operating instructions and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) To develop skills in reasoning, logic and problem solving. For drill and practice estimating length

in centimeters. To improve computation skills in four basic arithmetic operations. To determine the factor property of prime versus composite numbers.

INSTRUCTIONAL PREREQUISITES: (STATED) Some prior instruction in the metric system.

CONTENT AND STRUCTURE: Elementary Math contains four programs on problem solving strategies and computation. BAGELS is an educational game for the development of skills in reasoning and logic. ESTIMATE is a drill and practice exercise on estimating the lengths of random line segments in centimeters. SUPER DRILL is a drill on the four basic operations of addition, subtraction, multiplication and division. TAXMAN is a whole number factor exercise.

ESTIMATED STUDENT TIME REQUIRED: 10 to 15 minutes per program.

POTENTIAL USES: All of the programs would be useful for supplementary purposes only.

MAJOR STRENGTHS: BAGELS: Numbers are very visible. SUPER DRILL: Options are good.

MAJOR WEAKNESSES: BAGELS: The title has little relation to the topic, and the instructions are weak. ESTIMATE: Instructions for changing response time could not be found. Very simplistic! Random guesses often resulted in

Continued on back

### **EVALUATION SUMMARY**

SA	Α	D	SD NA	
	•			Content is accurate.
	•			Content has educational value.
		ē	-	Content is free of stereotypes.
		•		Purpose of package is well defined.
		٠		Package achieves defined purpose.
		•		Content presentation is clear and logical.
	•			Difficulty level is appropriate to audience.
	ě			Graphics/sound/color are used appropriately.
		•		Use of package is motivational.
		•		Student creativity is effectively stimulated.
		•	1	Feedback is effectively employed.

<b>\</b> . I	J.3D.Nº	<u> </u>
	•	Learner controls rate and sequence.
Т	•	Instruction integrates with prior learning.
	1 1.	Learning can be generalized.
•		User support materials are comprehensive.
•		User support materials are effective.
•		Information displays are effective.
•		Users can operate easily and independently.
•	1 1,	Teachers can employ package easily.
•		Computer capabilities are used appropriately.
•		Program is reliable in normal use.
		A D SD NA

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package only if certain changes were made.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Elementary Math, continued

correct answers. The use of the ruler is confusing. SUPER DRILL: Numbers generated by the program are readable. Some feedback words (ex: fabulous) are probably too hard for some users of this program. The program produces a wrong answer (6 + 9 = 23) in a correct-looking format. The program lacks effective feedback on trouble spots. At the end of the program, the bar graph success record is poor — it's too hard to follow. Also, instructional sequencing is not obvious. TAXMAN: The name and content do not match. The instructions and the entire game are confusing.

The producer indicated that the titles BAGELS and TAXMAN were taken from the time-sharing programs from which these originated.

OTHER COMMENTS: Documentation is lacking regarding student's performance and attitude when using the package. The objectives of all packages are weakly stated. All of these weaknesses (see above) could be easily taken care of.

# Math Skills — Junior High

PRODUCER:

Encyclopedia Britannica
Educational Corporation
425 N. Michigan Avenue
Chicago, IL 60611

EVALUATION COMPLETED: April, 1983 by the staff and constituents of PREPS, Mississippi State, Mississippi.

COST: \$74.00

ABILITY LEVEL: Grades 7 through 9
SUBJECT: Mathematics
TOPIC: Arithmetic
MEDIUM OF TRANSFER: 5-1/4 in. flexible disk
REQUIRED HARDWARE: 48K Apple II Plus,
single disk drive, monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Drill and
practice, tutorial, problem solving

DOCUMENTATION AVAILABLE: In program — student's instructions, and program operating instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, program operating instructions, teacher's information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) This package provides drill and practice in the areas of ratio and proportion, percent, graphing, estimation and measurement. The objectives are stated in detail in the documentation.

INSTRUCTIONAL PREREQUISITES: (STATED)
The users should be able to read at a minimal.
level. It would be helpful if students were
already familiar with the basic operation of the
computer system available to them.

CONTENT AND STRUCTURE: Math Skills — Junior High Level offers practice in the concepts of ratios and proportions, percents, graphics, estimating, and measuring. Each program component has been described as an objective and is labeled as such in the score display. The program components might also be called lessons. This package is the second of a series of two such packages sold seperately, but designed to be used in sequence. The first package contains objectives number 1 to 32. This package contains objectives 33 to 53.

POTENTIAL USES: This program is most appropriate for use by individual students.

MAJOR STRENGTHS: The tutorial and problem solving sections of the package are very good.

MAJOR WEAKNESSES: The instructions for the Fractions section are not clearly stated. The Percents section is weak and needs reworking.

### **EVALUATION SUMMARY**

A	ט	201	NA	
ē				Content is accurate.
•			-	Content has educational value.
•				Content is free of stereotypes.
-			$\exists$	Purpose of package is well defined.
ē				Package achieves defined purpose.
	ā			Content presentation is clear and logical.
	.ē	1		Difficulty level is appropriate to audience.
•		.		Graphics/sound/color are used appropriately.
ē			$\neg$	Use of package is motivational.
	•	1 1		Student creativity is effectively stimulated.
•	$\vdash$	$\Box$		Feedback is effectively employed.
	•	ē		

SA	Α	D	SD	NΑ	
	•				Learner controls rate and sequence.
	•				Instruction integrates with prior learning.
				•	Learning can be generalized.
			•		User support materials are comprehensive.
			•		User support materials are effective.
	•				Information displays are effective.
	•				Users can operate easily and independently.
	ē				Teachers can employ package easily.
	•			. .	Computer capabilities are used appropriately.
	<b>.</b>				Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package only if certain changes were made.



This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Chemistry — Acids and Bases

PRODUCER:

Encyclopedia Britannica Educational Corporation 425 N. Michigan Avenue Chicago, IL 60611

EVALUATION COMPLETED: May, 1983 by the staff and constituents of Region X ISC, Richardson, Texas.

COST: \$74.00

ABILITY LEVEL: Grades 10 through Postsecondary SUBJECT: Science
TOPIC: Chemistry
MEDIUM OF TRANSFER: 5-1/4 in. flexible disk
REQUIRED HARDWARE: 48K Apple II, single disk drive, monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard instruction INSTRUCTIONAL TECHNIQUES: Drill and practice, tutorial, simulation

DOCUMENTATION AVAILABLE: In program — program operating instructions and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, program operating instructions, teacher's information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) To develop basic chemistry skills in the areas of calculation of pH values, determining concentration of hydrogen ions, manipulation of acid/base equilibrium constant, titration calculation, and manipulation of the equilibrium formula for water.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Prior instruction on the concepts listed in the objectives.

CONTENT AND STRUCTURE: This program provides reinforcement exercises in three major areas: the acid/base equilibrium constant formula, equilibrium constant of the water in a strongly acidic/basic solution, and an acid/base titration simulation.

ESTIMATED STUDENT TIME REQUIRED: A total of two weeks for full benefit.

potential uses. This package is most appropriate for use with individual students. It could be used as drill and practice in reviewing for a test over the concepts, as a computer-generated test bank, or as a review station for students who finish other tasks early. The program provides a simulation that will save teacher time, compress hours of lab time into minutes, and approximate a real lab setting.

MAJOR STRENGTHS: In each of the three sections, students can practice without the need of an instructor's presence. The titration simulation may be used as a substitute for this type of experiment. The large print and spacing makes the program easy to read:

MAJOR WEAKNESSES: The sound feature could be made optional. It may be a disturbing influence in a classroom setting.

## **EVALUATION SUMMARY**

SA	Α	D	SD	NA.	<u></u>
•					Content is accurate.
•					Content has educational value.
•					Content is free of stereotypes.
•					Purpose of package is well defined.
	•				Package achieves defined purpose.
•					Content presentation is clear and logical.
•					Difficulty level is appropriate to audience.
	ē	-			Graphics/sound/color are used appropriately.
	•		,		Use of package is morivational.
				ě	Student creativity is effectively stimulated.
		•			Feedback is effectively employed.

ē	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized.
. •	User support materials are comprehensive.
•	User support materials are effective.
•	Information displays are effective.
• ,	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately
•	Program is reliable in normal use.

DISCUSSION OF

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland. Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.





# **Bumble Plot**

VERSION: 1982

PRODUCĒR:

The Learning Company

4370 Alpine Road

Portola Valley, CA 94025

EVALUATION COMPLETED: May 1983 by the staff and constituents of TIES, Roseville, Minnesota

COST: \$39.95

ABILITY LEVEL: Grades 3 through 8

SUBJECT: Mathematics

TOPIC: Arithmetic

MEDIUM OF TRANSFER: 5-1/4 in. disk REQUIRED HARDWARE: 48K Apple II or Apple He, disk drive, monitor (preferrably color) REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Enrichment INSTRUCTIONAL TECHNIQUES: Drill and practice, game, problem solving

DOCUMENTATION AVAILABLE: Suggested grade/ability level(s), sample program output, program operating instructions, student's instructions, student worksheets, follow-up activities.

INSTRUCTIONAL OBJECTIVES: Through problem solving games, the student will learn the concept of working on a grid.

INSTRUCTIONAL PREREQUISITES: It is assumed that the student has had previous experience with negative numbers.

CONTENT AND STRUCTURE: The package consists of one disk, a small manual, and nine activity cards in a hard cardboard folder. The program includes five games starting with a number line and progressing to a 10 x 10 grid using both positive and negative numbers.

ESTIMATED STUDENT TIME REQUIRED: The time needed to run a game would depend on age and ability of user, but one might allow at least 15-20 minutes per activity.

POTENTIAL USES: The package would be appropriate for individual or small group use for drill and practice or problem solving activities.

MAJOR STRENGTHS: The activities provide good practice in using coordinates with negative numbers. "Bumble Art" offers a chance for creative expression which is rare for software. "Road Block" is a highly motivational exercise in problem solving using coordinates.

MAJOR WEAKNESSES: The rewards for achieving goals could be better. With all the delightful graphics and sound in the introductions, the printed words, "YOU GOT IT" as a reward are a let down.

### **EVALUATION SUMMARY**

SA A D SDNA

•				Content is accurate.
•				Content has educational value
•				Content is free of stereotypes.
		•		Purpose of package is well defined.
	ē			Package achieves defined purpose.
	•			Content presentation is clear and logical.
ē	$\vdash$			Difficulty level is appropriate to audience.
ē	<u> </u>	П	1-	Graphics/sound/color are used appropriately.
ē			,	Use of package is motivational.
ī	İ			Student creativity is effectively stimulated.

Feedback is effectively employed.

SA A DSDNA -

	ē	П		Learner controls rate and sequence.
	•			Instruction integrates with prior learning.
				Learning can be generalized.
	1	ē		User support materials are comprehensive.
	•			C apport materials are effective.
•				Information displays are effective.
•			1.	Users can operate easily and independently.
•				Teachers can employ package easily.
	•			Computer capabilities are used appropriately.
•	$\top$		$\neg$	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue . Portland. Oregon 97204 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware Package.



## **Word Games**

PRODUCER:

MECC Publications 2520 Broadway Drive Lauderdale, MN 55113

EVALUATION COMPLETED: April 1983 by the staff and constituents of Linn-Benton County ESD; Albany, Oregon, and the staff of the Northwest Regional Educational Laboratory, Portland, Oregon.

COST: \$37.00

SUBJECT: Language arts
TOPIC: Spelling
MEDIUM OF TRANSFER: 5-1/4 in. flexible disk
REQUIRED HARDWARE: Atari 400 or 800
computer, one Atari 810 disk drive, monitor
REQUIRED SOFTWARE: Atari BASIC cartridge
INSTRUCTIONAL PURPOSE: Remediation,
standard instruction
INSTRUCTIONAL TECHNIQUES: Drill and
practice, game

program operating instructions, and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, student's instructions, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED) To reproduce correct spelling by visual recall; to recognize the combinations of letters which form words or parts of words; to infer words from definitions.

INSTRUCTIONAL PREREQUISITES: (STATED)
Students should be familiar with the operation of the computer and the keyboard.

CONTENT AND STRUCTURE: This package contains four language arts programs. A short description of each follows. RECALL flashes a word on the screen for recall and correct spelling. SCRAMBLE randomizes the sequence of letters in a word to be unscrambled. GUESS WORD presents a series of dots in place of letters and a clue to help identify the word to be guessed. LIST MAKER creates, edits, or deletes a list of words for RECALL, SCRAMBLE, or GUESS WORD.

potential USES: This package is most appropriate for use with individual students for drill and practice on spelling and vocabulary. It would be good for remedial or resource settings. Another application might be to set up a contest for unscrambling words where the winner has the fewest number of attempts. The package is excellent for visual learners.

MAJOR STRENGTHS: The package provides a way for the teacher to input his/her own word lists. This enables the teacher to tailor the package to fit the level of the students. Access to the word list is secured from unauthorized modification by a code word.

MAJOR WEAKNESSES: The directions for entering the word lists are a bit unclear and teachers had to frequently go to the documentation for help.

#### **EVALUATION SUMMARY**

SA A' D SDNA

•	Content is accurate.
	Content has educational value.
	Content is free of stereotypes.
Ī.	Purpose of package is well defined.
•	Package achieves defined purpose.
•	Content presentation is clear and logical.
ē	Difficulty level is appropriate to audience
•	Graphics/sound/color are used appropriately:
1.	Use of package is motivational.
1	Student creativity is effectively stimulated.
	Feedback is effectively employed.

ŠA Ä D SD ÑĀ

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized.
•	User support materials are comprehensive.
ē	User support materials are effective.
	Information displays are effective.
• •	Users can operate easily and independently.
•	Teachers can employ package easily.
0	Computer capabilities are used appropriately
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



## Division 1

PRODUCER:

Scott, Foresman and Company

1900 East Lake Avenue Glenview, IL 60025

EVALUATION COMPLETED: April, 1983 by the staff and constituents of IER, Glenn Ellyn, Illinois.

COST: \$39.95

ABILITY LEVEL: Grades 3 through 5

SUBJECT: Mathematics

TOPIC: Division

MEDIUM OF TRANSFER: ROM Cartridge

REQUIRED HARDWARE: TI 99/4 and TI 99/4A, color video, speech synthesizer (headset and

adapter optional)

REQUIRED SOFTWARE: ROM cartridge INSTRUCTIONAL PURPOSE: Standard

instruction, remediation

INSTRUCTIONAL TECHNIQUES: Drill and

practice, tutorial

DOCUMENTATION AVAILABLE: in program program operating instructions. In supplementary materials - suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, teacher's information, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED) To give the student instruction, drill and practice of the basic division facts with divisors though 9.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Knowledge of multiplication facts through 9.

CONTENT AND STRUCTURE: This package employs color graphics, animation, music, sound effects and voice to motivate and guide the student through instruction and practice of basic division facts.

ESTIMATED STUDENT TIME REQUIRED: 10-15 minutes per day.

POTENTIAL USES: This package is most appropriate for use with individual students. It could be used as review for the slower learners, or as a bonus for the average and lower level children.

OTHER COMMENTS: The sound is nicely done and is good for those using the package. Therefore, the sound should be used either audibly or with headphones. Some teachers have commented that the audible sound could be distracting to other students in the class. On the other hand, teachers have commented that they can tell how the student is doing and if he/she needs help by listening to the audible sound.

### **EVALUATION SUMMARY**

SA	Α	D	SDI	NA	
•					Content is accurate.
	ē			·	Content has educational value.
ō					Content is free of stereotypes.
					Purpose of package is well defined.
•		1			Package achieves defined purpose.
	•				Content presentation is clear and logical.
•				7	Difficulty level is appropriate to audience.
	•		İ	Ī	Graphics/sound/color are used appropriately.
	•	_	$\Box$		Use of package is motivational.
		•		•	Student creativity is effectively stimulated.
	•				Feedback is effectively employed.

SA A D SD NA

	•		Learner controls rate and sequence.
	•	٥	Instruction integrates with prior learning.
	•		Learning can be generalized.
	•		User support materials are comprehensive.
	•		User support materials are effective.
	•	1	Information displays are effective.
•,			Users can operate easily and independently.
•			Teachers can employ package easily.
	•		Computer capabilities are used appropriately.
	•		Program is reliable in normal use.

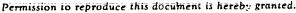
SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Gregon 97204 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.





# **Precision Timer**

PRODUCER:

Vernier Software

2920 S.W. 89th Street Portland, OR 97225

EVALUATION COMPLETED: April, 1983 by the staff and constituents of Region X ESC, Richardson, Texas.

COST: \$39.95

ABILITY LEVEL: Grade 10 through postsecondary SUBJECT: Physics
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple II Plus, single disk drive, monitor, Pasco photogates.
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard instruction, enrichment
INSTRUCTIONAL TECHNIQUES: Lab instrument

DOCUMENTATION AVAILABLE: In supplementary materials — instructional objectives, program operating instructions, teacher's information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) To allow the computer to be used as a flexible and accurate timer.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The student must know the units of measurement of time for very small time intervals. The student must know and be able to apply various time measurement techniques. The student must know how to use the photogates in conjunction with the computer.

CONTENT AND STRUCTURE: This program allows you to use an Apple computer as an accurate and very flexible laboratory timer. There are 13 modes of operation, most of which require photogates. Times from 0.0001 seconds to 54 hours may be measured. In addition, the computer can store data, do statistics, print the time in large block digits, and save data tables on a disk. In certain modes, the computer can calculate speed and acceleration.

ESTIMATED STUDENT TIME REQUIRED: One hour

POTENTIAL USES: The program may be used in a classroom setting to allow the computer to be used as a timer, and also to print out the mean and standard deviation as a result of the input data.

MAJOR STRENGTHS: The large size of the characters displayed makes use with a large class feasible. By using this program, the computer can replace the "stopwatch", and in certain modes, can be used to do the calculations of speed and acceleration.

MAJOR WEAKNESSES: The student must be familiar with scientific notation form used by the computer (8.9E-03).

OTHER COMMENTS: The material in this package was designed for use by a small target audience.

#### **EVALUATION SUMMARY**

SA A D SDNA

•				Content is accurate.
	•			Content has educational value.
•				Content is free of stereotypes.
	•			Purpose of package is well defined.
•				Package achieves defined purpose.
•				Content presentation is clear and logical.
	•			Difficulty level is appropriate to audience
			ē	Graphics/sound/color are used appropriately.
	_	•	T T	Use of package is motivational.
	ē			Student creativity is effectively stimulated.
_	ē			Feedback is effectively employed.

SA A D SD NA

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized.
•	User support materials are comprehensive.
•	User support materials are effective.
	Information displays are effective.
. •.	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



# Arith-Magic

PRODUCER:

Quality Educational Designs

P.O. Box 12486 Portland, OR 97212

EVALUATION COMPLETED: June, 1982 by the staff and constituents of Linn-Benton ESD, Albany, Oregon.

COST: \$35.00

ABILITY LEVEL: Grades 2 through 9

SUBJECT: Mathematics

TOPIC: Addition, Subtraction, Multiplication,

Division, Theory Exploration

MEDIUM OF TRANSFER: 5-1/4 in. flexible disk,

or tape cassette

REQUIRED HARDWARE: 48K Apple II, single disk drive, monitor. Also: TRS-80 I or III 16K tape, TRS-80 III 32K disk; PET 16K tape or disk; and Commodore 64 tape or disk

REQUIRED SOFTWARE: Applesoft, DOS 3.2 or

3.3

INSTRUCTIONAL PURPOSE: Remediation,

enrichment

INSTRUCTIONAL TECHNIQUES: Drill and

practice, game, problem solving

sample program output, program operating instructions, and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, student's instructions, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED)
DIFFY—to provide drill and practice in
subtraction in a game mode. TRIPUZ—to
provide drill and practice in the four basic math
operations, to develop problem solving skills as
the student tries to discover a general solution to
the puzzle. MAGIC SQUARES—to develop an
understanding of averages and arithmetic
sequences.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Prior instruction in the four basic math operations.

CONTENT AND STRUCTURE: This package contains three puzzles and games: DIFFY on subtraction; TRIPUZ on addition, subtraction, multiplication, and division; and MAGIC SQUARES on patterns, averages, and arithmetic sequences.

POTENTIAL USES: For elementary classrooms: practice in addition, subtraction, multiplication and division. For secondary classrooms: theory exploration. Algebra students can find solutions algebraically.

MAJOR STRENGTHS: The programs progress at different levels of difficulty. The directions which appear on the screen and in the manual are very good. The program is easily operated. This package offers stimulating higher level thinking skills. These math games are very usable.

MAJOR WEAKNESSES: None stated.

### EVALUATION SUMMARY

•	Content is accurate.
•	Content has educational value.
····	• Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
•	Content presentation is clear and logical.
	Difficulty level is appropriate to audience.
0	Graphics/sound/color are used appropriately.
- ; <del></del>	Use of package is motivational.
	Student creativity is effectively stimulated.
	- Feedback is effectively employed.

ŠA Ä D ŠD NĀ

•		Learner controls rate and sequence.
	•	Instruction integrates with prior learning.
	•	Learning can be generalized.
•	T	User support materials are comprehensive.
	•	User support materials are effective.
	ē	Information displays are effective.
	• .	Users can operate easily and independently.
	•	Teachers can employ package easily.
	•	Computer capabilities are used appropriately.
	•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



# Geography

VERSION: 1.2

PRODUCER:

MECC Publications 2520 Broadway Drive Lauderdale, MN 55113

EVALUATION COMPLETED: April, 1983 by the staff and constituents of Ling-Benton ESD, Albany, Oregon, and the staff of Northwest Regional Educational Laboratory, Portland, Oregon.

COST: \$37.00

ABILITY LEVEL: Grades 4 through 10 SUBJECT: Geography MEDIUM OF TRANSFER: 5-1/4 in flexible disk REQUIRED HARDWARE: Atari 400 or 800, one Atari 810 disk drive, monitor REQUIRED SOFTWARE: Atari BASIC cartridge INSTRUCTIONAL PURPOSE: Standard instruction INSTRUCTIONAL TECHNIQUES: Drill and practice

DOCUMENTATION AVAILABLE: In program—program operating instructions and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, teacher's information, resource/reference information, student's instructions, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED) To recognize the characteristic shape of states, countries and continents. To identify a state as part of a geographic region, and countries as part of continents. To identify the capital of each of the United States. To be able to spell the names of the states, capitals, countries and continents:

INSTRUCTIONAL PREREQUISITES: (INFERRED)
Some prior instructions on the objective stated above.

CONTENT AND STRUCTURE: Geography contains four drill and practice programs (States, Capitals, Continents, and Countries) appropriate for use with students who are learning the names and locations of cities, states, countries, and continents. The programs allow students to select the geographical area and the number of problems. The problems are selected randomly by the program within the selected area.

POTENTIAL USES: This package is most appropriate for use with individual students or with small groups of students in a geography class:

MAJOR STRENGTHS: The graphics displays of states, regions, countries, and continents are very good. The package provides for the user to: select the level, review the instructions upon request, have more than one chance to answer, receive hints when needed, and to see their level of achievement when finished.

MAJOR WEAKNESSES: The graphics display of the Northeastern states is a bit small making it hard to discern the individual states. The package is not totally self-documenting in that students are not told how to exit the program or that it is necessary to enter the complete name (abbreviations are rejected). Generally, the package is not a high motivator for students.

#### **EVALUATION SUMMARY**

SA	À	D	SD	NA
SA	$\sim$	$\boldsymbol{\mathcal{L}}$	30	. 473

•	Content is accurate.
•	Content has educational value.
-	Content is free of stereotypes.
•	Purpose of package is well defined.
1 6	Package achieves defined purpose.
•	Content presentation is clear and logical.
	Difficulty level is appropriate to audience.
• -	Graphics/sound/color are used appropriately
	Use of package is motivation
• <u>.</u>	Student creativity is effective
• •	Feedback is effectively emr

### ŠĀ Ā D SD NĀ

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized
•	User support materials are comprehensive:
•	User support materials are effective.
ā	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
• -	Computer capabilities are used appropriately.
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they we ild use

secommend use of this program with little or no change.



This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

# Reading Roundup

PRODUCER:

Scott, Foresman and Company

1900 East Lake Avenue Glenview, IL 60025

EVALUATION COMPLETED: April, 1983 by the staff and constituents of IER, Glenn Ellyn, Illinois.

COST: Unknown

ABILTY LEVEL: Grade 4
SUBJECT: Reading
MEDIUV. OF TRANSFER: ROM Cartridge
REQUIRED HARDWARE: TI-99/4A and monitor
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Tutorial

program operating instructions, post-test, and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, post-test, teacher's information, resource/reference information, student worksheets, and textbook correlation.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide drill and practice in the areas of figures of speech, appropriate word meaning/unfamiliar words, and idioms:

INSTRUCTIONAL PREREQUISITES: Fourth grade reading level in any Basal reading program.

CONTENT AND STRUCTURE: This package employs graphics animation and sound to supplement the Basal Reading Program. It follows the teach/practice/apply/assess model of instruction.

ESTIMATED STUDENT TIME REQUIRED: Varies with student.

POTENTIAL USES: This package is most appropriate for use with individuals or with small groups. It could be used as reinforcement of skills already learned, or as extra practice on hard to learn skills.

MAJOR STRENGTHS: The use of color visuals and music is very stimulating and motivating to students.

OTHER COMMENTS: The music is fantastic and children enjoy the package.

#### **EVALUATION SUMMARY**

•	Content is accurate.
•	Content has educational value.
• 1	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
•	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately.
•	Use of package is motivational.
•	Stud creativity is effectively stimulated.
	Feedback is effectively employed.

SA A D SD NA

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized.
•	User support materials are comprehensive.
-	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independen
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately
•	Program is reliable in normal use:

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



## Earl's Word Power

PRODUCER:

George Earl

1302 General McMullen San Antonio, TX 78237

EVALUATION COMPLETED: April, 1983 by the staff and constituents of IER, Glenn Ellyn, Illinois.

COST: \$29.95

ABILITY LEVEL: Grades 4 through 12
SUBJECT: Language arts
TOPIC: Homonyms
MEDIUM OF TRANSFER: 5-1/4" flexible disk
REQUIRED HARDWARE: 48K Apple II, single
disk drive, monitor
REQUIREL SOFTWARE: Applesoft, DOS 3.2 or 3.3
INSTRUCTIONAL PURPOSE: Standard
instruction, remediation, enrichment
INSTRUCTIONAL TECHNIQUES: Drill and
practice, tutorial

DOCUMENTATION AVAILABLE: In program — program operating instructions, post-test, student's instructions, and follow-up activities. In supplementary materials — program operating instructions and student's instructions.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
The student will be able to identify the correct
use of various homonyms.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The ability to read prompting messages.

CONTENT AND STRUCTURE: After teaching a variety of words, Shakespearean plays are used to test the student's knowledge.

ESTIMATED STUDENT TIME REQUIRED: Varies with student.

POTENTIAL USES: This package is most appropriate for use with individual students.

MAJOR STRENGTHS: The package is very motivating for over achieving students.

MAJOR WEAKNESSES: The use of Shakespeare might be threatening to some students.

### **EVALUATION SUMMARY**

SA_	A	D_	SD	N	A

•		Content is accurate.
•		Content has educational value.
		Content is free of stereotypes.
, ,		Purpose of package is well defined.
, ;		Package achieves defined purpose
	1	Content presentation is clear and logical.
, T   T	-	Difficulty level is appropriate to audience.
	•	Graphics/sound/color are used appropriately.
•		Use of package is motivational.
•		Student creativity is effectively stimulated.
	1	Feedback is effectively employed.

ŠA Ä D ŠD ÑĀ

<del></del>		_		<del></del>	
	•			Learner controls rate	and sequence.
	•		-	Instruction integrates	with prior learning.
	•			Learning can be gene	ralized.
		•		User support material	ls are comprehensive.
	•		1_	User support material	s are effective.
ē				Information displays	are effective.
•				Users can operate eas	ily and independently.
•				Teachers can employ	package easily.
_	•		1	Computer capabilities	s are used appropriately.
•		_		Program is reliable in	normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



# Reading Flight

PRODUCER:

Scott, Foresman and Company 1900 East Lake Avenue

Glenview, IL 60025

EVALUATION COMPLETED: April, 1983 by the staff and constituents of IER, Glenn Ellyn, Illinois.

COST: \$54.95

ABILITY LEVEL: Grade 6
SUBJECT: Reading
MEDIUM OF TRANSFER: ROM Cartridge
REQUIRED HARDWARE: TI 99/4 and TI 99/4A,
color video (headset and adapter optional)
REQUIRED SOFTWARE: ROM Cartridge
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Tutorial

program operating instructions, and student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, student's instructions, student worksheets, and textbook correlation.

INSTRUCTIONAL OBJECTIVES: (STATED) Understanding how to classify information, summarize information, and outline information.

INSTRUCTIONAL PREREQUISITES: (STATED) Sixth grade level in any Basal Reading Program.

CONTENT AND STRUCTURE: This package is a tutorial on classifying, summarizing, and outlining information. It employs color graphics, animation, music and sound effects for motivation and guidance.

ESTIMATED STUDENT TIME REQUIRED:
Minimum of 15 minutes per program per student.

POTENTIAL USES: The package is most ap priate for use with individuals or with small groups. It could be used as an introduction to or a review of outlining skills. Classifying activities for thinking skills can be followed up with a project where students make-up classification games to stump classmates, like \$20,000 pyramid.

MAJOR STRENGTHS: The use of color visuals and music is very stimulating and motivating to students.

OTHER COMMENTS: The package uses one story for a concept. It would be more useful if other stories were included.

## **EVALUATION SUMMARY**

ŠÁ A D ŠDŇÁ

•	Content is accurate.
•	Content has educational value,
•	Content is free of stereotypes.
-	Purpose of package is well defined:
•	Package achieves defined purpose.
•	Content presentation is clear and logical.
ō	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately.
•	Use of package is motivational.
	Sudent creativity is effectively stimulated.
•	Feedback is effectively employed.

SA A D SE) NA

•	Learner controls rate and sequence.
0	Instruction integrates with prior learning.
•	Learning can be generalized.
•	User support materials are comprehensive.
•	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.

55





# The Market Place

VERSION: 1.1

PRODUCER:

MECC Publications 2520 Broadway Drive Lauderdale, MN 55113

EVALUATION COMPLETED: April, 1983 by the staff and constituents of Linn-Benton ESD, Albany, Oregon, and the staff of Northwest Regional Educational Laboratory, Portland, Oregon.

COST: \$36.00

ABILITY LEVEL: Grades 3 through 8
SUBJECT: Economics
TOPIC: Marketing
MEDIUM OF TRANSFER: 5-1/4 in flexible disk
REQUIRED HARDWARE: Atari 400 or 800 computer,
one Atari 810 disk drive, monitor
REQUIRED SOFTWARE: Atari BASIC cartridge
INSTRUCTIONAL PURPOSE: Enrichment
INSTRUCTIONAL TECHNIQUES: Simulation, game

DOCUMENTATION AVAILABLE: In program — program operating instructions and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, student's instructions, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED) To define and understand profit, advertising, assets, inventory, production supply and demand. To determine the relationship between supply and demand, production price and advertising. To estimate, compare and determine cost.

INSTRUCTIONAL PREREQUISITES: (STATED) Some knowledge of the definitions of the words price, profit, advertising, expenses, assets, inventory and supply and demand:

CONTENT AND STRUCTURE: This package contains four simulation programs on the topic of economics. Below is a short description of each program. SELL APPLES is a simulation involving finding the "best price" for a product. SELL PLANTS is a simulation on the effect of advertising on sales and profit. SELL LEMONAPE is a simulation that determines profit based on production and advertising cost. SELL BICYCLE is a simulation on the managing of a bicycle company determining production level, advertising budget, and selling price.

POTENTIAL USES: This package is most appropriately used for enrichment with individual students and with groups of students. It could be used in consumer education classes, business math classes, economics classes, or social studies class. The skills developed by the use of the package are: problem solving, critical thinking, group decision making, and graph and chart interpretation.

MAJOR STRENGTHS: The package contains four excellent simulations that can be used with individual students or with groups of students. Use of the package is motivating to students and the documentation is extensive. The feedback from the programs develop and clarify various economic concepts.

MAJOR WEAKNESSES: The simulations are probably less relevant to urban minorities and could be improved by using a greater variety of goods or situations. An error message occurred while using the package.

According to the producer, these problems exist when the program is run on the newer Atari's. These problems have been corrected in Version 2.1.

OTHER COMMENTS: The students need some prior discussion about the concepts of supply and demand, production, price, estimate and others, before they can achieve success.

#### **EVALUATION SUMMARY**

#### ŠĀĀ D SDNĀ

•	Content is accurate.
	Content has educational value
-	Content is free of stereotypes:
•	Purpose of package is well defined.
•	Package achieves defined purpose.
	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately.
1.0	Use of package is motivational.
• 1	Student creativity is effectively stimulated.
•	Feedback is effectively employed.

### SA A D SD NA

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
ē	Learning can be generalized:
•	User support materials are comprehensive.
•	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately.
• •	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Computer Math Activities Volume 4

VERSION: Apple

PRODUCER:

Addison-Wesley Publishing Company

School Division Sand Hill Road

Menlo Park, CA 94025

EVALUATION COMPLETED: May, 1983 by the staff and constituents of Region X ISC, Richardson, Texas:

COST: \$15.00

ABILITY LEVEL: Grades 1 through 9

SUBJECT: Mathematics TOPIC: Arithmetic

MEDIUM OF TRANSFER: 5-1/4 in. flexible disk REQUIRED HARDWARE: 32K Apple II, single disk

drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Drill and practice, game

DOCUMENTATION AVAILABLE: In program — program operating instructions, and student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, student's instructions, and student worksheets.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide practice adding, subtracting, multiplying, or dividing whole numbers, decimals, or integers. To provide practice ordering numbers, translating from word numbers to Arabic numerals, and manipulation of fractions and percents.

INSTRUCTIONAL PREREQUISITES: The student must have obtained the skills used in the game to successfully participate.

CONTENT AND STRUCTURE: This package is made up of five math games. MONEY GUESSER provides practice in developing strategies for finding a number within a selected range of numbers (1 or more players/teams); TOP OF THE MOUNTAIN provides timed practice in translating numbers from English words to Arabic numerals (for 2 players/teams); MIX AND MATCH provides timed practice with basic facts and manipulation of fractions and percents (for 1-5 players/teams); PINBALL MATH provides timed practice adding, subtracting, multiplying, or dividing whole numbers, decimals, or integers (for 1-5 players/teams); and TABLO provides practice adding, subtracting, multiplying, or dividing whole numbers, decimals, or integers (for 1-5 players/teams).

ESTIMATED STUDENT TIME REQUIRED: Varies by activity from several minutes to half an hour.

POTENTIAL USES: The programs are appropriate for use in a learning resource area for drill and practice in a multitude of specific math skill areas. This package can be used by individual students or teams of students.

MAJOR STRENGTHS: The package covers basic mathematics concepts and can be customized to meet a variety of grade and ability levels.

MAJOR WEAKNESSES: None stated:

### **EVALUATION SUMMARY**

S	Ä-	-A	D	SD	NA	

	Content is accurate.
•	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
•	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately.
•	Use of package is motivational.
E."	Student creativity is effectively stimulated.
•	Feedback is effectively employed.
	<del></del>

SA A D SD NA

•			Learner controls rate and sequence.
-			Instruction integrates with prior learning:
•			Learning can be generalized.
-	•		User support materials are comprehensive.
	· L	-	User support materials are effective.
<del>-</del>	i		Information displays are effective.
ē		-	Users can operate easily and independently.
•			Teachers can employ package easily.
ó	1		Computer capabilities are used appropriately.
•		_  -	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland: Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package:



# The Decision Shop

PRODUCER:

The Children's Museum

of Indianapolis Indianapolis, Indiana

Contact:

Dr. Marianne Talafuse

Center for Economic Education 146 WB, Ball State University

Muncie, Indiana 47306

EVALUATION COMPLETED: June 1983 by the staff and constituents of Linn-Benton ESD, Albany, Oregon.

COST: Unknown

ABILITY LEVEL: Grades 4 through 8

SUBJECT: Social Studies

TOPIC: Economics

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: Apple II, disk drive,

monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation,

standard instruction, enrichment

INSTRUCTIONAL TECHNIQUES: Drill and practice, tutorial, simulation, problem solving

DOCUMENTATION AVAILABLE: In program - student's instructions.

INSTRUCTIONAL PREREQUISITES: Whole number operations (addition, subtraction, multiplication, division). Upper elementary reading ability.

CONTENT AND STRUCTURE: One disk with three simulation programs: KINGDOM is similar to "Hamurabi" in that the object is to buy and sell land, plant wheat and feed people. STAR TRADER involves balancing food, air, fuel and water for a space colony. SELL ROBOTS is similar to "Sell Apple" from MECC. The user determines optimum selling price through trial and error followed by a tutorial review.

ESTIMATED STUDENT TIME REQUIRED: 20 to 30 minutes

POTENTIAL USES: Individuals, small groups, or entire classrooms

MAJOR STRENGTHS: This package is fun and challenging. It allows the students to see results of decision making and how one variable affects another.

MAJOR WEAKNESSES: There are no user support materials. Too much time is lost on graphics. The large graphic "words" are hard to read from the operator position. All directions have to be gone through each time (students would want to get right to the program after going through it once or twice). There is no way or pausing during the program most of the time.

### **EVALUATION SUMMARY**

SA A D SD NA

•	Content is accurate.
•	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined
•	Package achieves defined purpose.
•	Content presentation is clear and logical:
•	Difficulty level is appropriate to audience.
ē	Graphics/sound/color are used appropriately:
•	Use of package is motivational:
	Spidant regaritates is affectively stimulated

Feedback is effectively employed

SĀĀ DSDNĀ

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
ā	Learning can be generalized:
Ī	User support materials are comprehensive.
ē	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
_ •	Teachers can employ package easily.
•	Computer capabilities are used appropriately.
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland. Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

Permission to reproduce this document is hereby granted.



# Krell's College Board SAT

VĒRSION: 1981

PRODUCER:

Krell Software Corporation

21 Millbrook Drive Stony Brook, NY 11790

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$249.95

ABILITY LEVEL: High School
SUBJECT: Mathematics, Language Arts
TOPIC: SAT Examination preparation
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: 48k Apple II+, disk drive,
monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Assessment
INSTRUCTIONAL TECHNIQUES: Drill and practice,
tutorial

DOCUMENTATION AVAILABLE: In program — student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, program operating instructions, teacher's information, student worksheets.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide a set of study levels and aids that enable students to improve their personal performance on SAT and PSAT exams. Other objectives are stated on page 9 of the manual.

INSTRUCTIONAL PREREQUISITES: (INFERRED)
Package was developed for students preparing to take the SAT exam.

CONTENT AND STRUCTURE: In each of the six diskettes in the series, the student is provided with drill and practice exercises designed to improve skills in

specific areas (math, vocabulary, word relationships, reading and sentence comprehension, tests of written English). The student can choose to see the reasoning or logic behind the correct answer whether or not he responds incorrectly to a problem. (The manual provides source materials used in some of the programs.) The student is given immediate feedback and scores and is provided with an opportunity to request another problem of the same type. Optional features include a worksheet generator, diagnosis and study prescriptive, classroom management system, vocabulary builder package, and complete classroom tutorial package (available in 1984).

ESTIMATED STUDENT TIME REQUIRED: The time could vary widely since the student is allowed to choose the number of problems he wants. Probably 15 minutes to one hour.

POTENTIAL USES: The package would be used in a college bound class or college prep course to help students prepare for the SAT or PSAT. This package could be used by individual students as a self-help program of study.

MAJOR STRENGTHS: The directions are clear and the program is easy to use. The student gets immediate feedback and can ask for an explanation of correct answers. The format is consistent with SAT scoring and question types.

MAJOR WEAKNESSES: The management system costs extra—it is not included with the package. Some words are truncated. The sentence "Neither parents nor wife know of HER (Edward's) activities." appears in Test #7, Disk TSWEZ. The format is not consistent from one disk to another, as if there were different programmers.

OTHER COMMENTS: Documentation insinuates that networking license is available.

### **EVALUATION SUMMARY**

SA	Α	, D	SDI	NA.		
•				Ī	Content is accurate.	
•		i			Content has educational value.	_
•	i		! !		Content is free of stereotypes.	_
	ē		1	_	Purpose of package is well defined.	_
	•	-		$\neg$	Package achieves defined purpose.	
_	ē				Content presentation is clear and logical.	
•				_1	Difficulty level is appropriate to audience.	
				ö	Graphics/sound/color are used appropriately.	
	•			$\overline{}$	Use of package is motivational.	
			: t		Student creativity is effectively stimulated.	
	•	:			Feedback is effectively employed.	_

SA A D SD NA

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
	Learning can be generalized.
•	User support materials are comprehensive.
•	Ser support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
	Computer capabilities are used appropriately
-   -	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.

63





## **CARIS**

PRODUCER:

Encyclopedia Britannica Education Corporation 425 N. Michigan Avenue Chicago, IL 60611

EVALUATION COMPLETED: April. 1983 by the staff and constituents of PREPS, Mississippi State, Mississippi.

COST: \$74.00

ABILITY LEVEL. Kindergarten through grade 3
SUBJECT: Language Arts
TOPIC: Reading, Parts of Speech
MEDIUM\_OF TRANSFER: 5-1/4 in. flexible disk
REQUIRED HARDWARE: 48K Apple II Plus, disk drive,
monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.3

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, enrichment INSTRUCTIONAL TECHNIQUES: Drill and practice, tutorial

DOCUMENTATION AVAILABLE: In supplementary materials — suggested grade/ability level(s), prerequisite skills or activities, sample program output, program operating instructions, teacher's information, resource/reference information, and student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) To introduce reading skills to low-readiness children.

INSTRUCTIONAL PREREQUISITES: None stated.

CONTENT AND STRUCTURE: CARIS addresses the problem of the beginning reader through noun and verb selection, followed by an animated cartoon illustrating the meaning of the ser, more the child has formed.

Designed with an approximate to learning similar to a child's play, CARIS encourage and the cartoon the program without placing emphasis on correct responses. The

package provides three response options. Scanning is the simplest response option and is intended for use by students with no knowledge of letters and typing. In this option, the computer scans through the list of words with an arrow. When the arrow points to a word that the student would like to select, he or she presses any key on the keyboard. Typing is intended for experienced users who can select words by typing them. Students must enter their typed word by pressing the RETURN key. In this option, the computer does not provide assistance in spelling the words. If a word is incorrectly spelled, the computer indicates that it does not recognize that word and allows the student to try again. Cued Typing is an intermediate response option that helps introduce typing to the students. Again, the arrow scans the list of words. The student presses any key to select a word, but then is asked by the computer to type the word he or she has selected. The computer helps the student type by accepting only the correct letters.

POTENTIAL USES: This program is most appropriate for use by individual students or by two students working together.

MAJOR STRENGTHS: The program is motivational for very young children (i.e., 4 to 5 year-olds). It may be effective for older children (i.e., grades 2 or 3) in remedial work.

MAJOR WEAKNESSES: The graphic representation of some of the letters was difficult for a 4 year-old to distinguish (i.e., did not think the "w" looked like a "W").

### **EVALUATION SUMMARY**

•	Content is as salate.
•	Content har er ugation divalue.
•	Content is tree of there stypes.
•	Purpose of package well defined.
•	Package achi. res defined purposi -
•	Content presentation is clear and togical.
+=	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately:
•	Use of package is motivational:
•	Student creativity is effectively stimulated.
•	Feedback is effectively employed.

1.		Instruction integrates with prior learning.
		Learning can be generalized.
	•	1. sr support materials are comprehensive.
	•	User support materials are effective.
		Information displays are effective.
$\top$		Users can operate easily and independently.
		•

Learner controls rate and sequence

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Teachers can employ package easily.

Program is reliable in normal use.

Computer capabilities are used appropriately.

Evaluators indicated that they would use or recommend use of this package only if certain changes were made.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

Permission to reproduce this document is hereby granted.



ŠĀ Ā D SD NĀ

•

# Reading Rally

PRODUCER:

Scott, Foresman and Company

1900 E. Lake Avenue Glenview, IL 60025

EVALUATION COMPLETED: May, 1983 by the staff and constituents of Institute for Educational Research (IER), Glenn Ellyn, Illinois

COST: \$54.95

ABILITY\_LEVEL: Grade 5 SUBJECT: Language Arts TOPIC: Reading MEDIUM OF TRANSFER: ROM Cartridge REQUIRED HARDWARE: TI 99/4A, monitor, headset and adapter (optional) REQUIRED SOFTWARE: (See MEDIUM OF TRANSFER, above) INSTRUCTIONAL PURPOSE: Standard instruction INSTRUCTIONAL TECHNIQUES: Tutorial

DOCUMENTATION AVAILABLE: In program program operating instructions. In supplementary materials - suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, teacher's information, student's instructions, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (INFERRED) To introduce the following concepts to the student: 1) fact and opinion, 2) author's purpose, and 3) bias/connotations of words.

INSTRUCTIONAL PREREQUISITES: None stated.

CONTENT AND STRUCTURE: This package is one of a series of twelve such packages that together form a comprehensive reading program for grades 1 to 6. The program employs graphics and sound to motivate and guide the student through the teach/practice/apply/assess approach.

ESTIMATED STUDENT TIME REQUIRED: Varies with the student. Scott, Foresman and Company Reading Specialist suggested one hour.

POTENTIAL USES: The concepts reinforced in this package are the same concepts that are sometimes difficult to teach in the classroom. After the students work with this package, classroom instruction will be more effective. Use as an aid or a supplement.

MAJOR STRENGTHS: The teacher's guide is excellent. The package provides the opportunity for the student to pace him/herself. The worksheets and the graphics are good.

MAJOR WEAKNESSES: Too few examples are provided in some places. There is too much time allowed in some of the sequences (this can be speeded up by using the enter key). Directions for using the enter key to "move on" should be clearly stated.

#### EVALUATION SUMMARY

S.A. D.SE	NX
	Content is accurate.
•	Content has educational value.
	Content is free of stereotypes.
•	Purpose of package is well sefined.
	Package achieves defined purpose.
•	Content presentation is clear and logical.
•	Diff vu. y level is appropriate vaudience.
•	Graphic sound/color are used appropriately.
	Use of wage is motivational.
· · · · · · · · · · · · · · · · · · ·	Studen reativity is effectively simulated.
-	Feedback is fectively employed

SM.	. A	· U	့သပ	'* A'	
•					Learner controls rate and sequence
•					Instruction integrates with prior learning.
•				ÎΤ	Learning can be generalized.
	ē				User support materials are comprehensive.
					User support materials are effective.
	ē		-		Information displays are effective.
ē	-				Users can operate easily and independently.
ė					Teachers can employ package easily.
•					Computer capabilities are used appropriately.
•			i		Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD-Strongly Disagree NA - Not Applicable

Findostors are taken that they would highly recommend this package.



10 15 vert 1 agu - al F. ocational Laboratory 300 Wistert , Genus • Portländ, Oregon 97204 (503) 248 13

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



# Moptown

VERSION: 1981 (680-0101-A)

PRODUCER: The Learning Company

4370 Alpine Road

Portola Valley, CA 94025

EVALUATION COMPLETED: May 1983 by the staff and constituents of TIES, Roseville, Minnesota.

COST: \$50.00

ABILITY LEVEL: Grades 1 through 12

SUBJECT: Mathematics

TOPIC: Logic

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II or Apple
IIe, disk drive, monitor (preferrably color)

REQUIRED SOFTWARE: Applesoft, DOS 3.3

INSTRUCTIONAL PURPOSE: Standard instruction,
remediation, enrichment, assessment
INSTRUCTIONAL TECHNIQUES: Problem solving,
game

DOCUMENTATION AVAILABLE: Suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, teacher's information, resource/reference information, student's instructions, student worksheets, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: The user will learn logic concepts and language concepts.

INSTRUCTIONAL PREREQUISITES: It is assumed that user can read or has someone to read directions and cues.

CONTENT AND STRUCTURE: The package consists of a master disk, back up disk and manual in a cardboard folder. The program consists of eleven logic games progressing from a preschool to adult level.

ESTIMATED STUDENT TIME REQUIRED: The amount of time needed to use this package depends heavily on age and ability of user. A half hour minimum should be allowed per activity.

POTENTIAL USES: The package could be used with individual students or in small groups. It could also be used to motivate group discussions and group problem solving skills (levels of thinking, systematic questioning, application of information, synthesis). Group activities are suggested in the manual.

MAJOR STRENGTHS: The package has activities awaring a wide range of abilities. It promotes well thinking skills and visual discrimination.

AKNESSES: The first level activities varioenefitted from larger graphic displays, weakness).

LER COMMENTS: Evaluators were impressed by the level of thinking skills involved in the activities. They involved not only memory and drill and practice, but also higher level evaluation, synthesis, and application. Very few programs have these high level thinking skills.

## EVALUATION SUMMARY

			Content is accurate.
			Content has educational value.
			Content is free of stereotypes.
: •	!		Purpose of package is well defined.
•	:	-	Package achieves defined purpose.
•		;	Content presentation is clear and logical.
•			Difficulty level is appropriate to audience.
•		:	Graphics/sound/color are used appropriately.
• ;		-	Use of package is motivational.
•	- :		Student creativity is effectively stimulated.
			Feedback is effectively employed

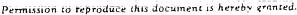
SA A	D SD N	
•		Learner controls rate and sequence.
•		Instruction integrates with prior learning.
•		Learning can be generalized.
•		User support materials are comprehensive.
•		User support materials are effective.
•		Information displays are effective.
•		Users can operate easily and independently.
•		Teachers can employ package easily.
•		Computer capabilities are used appropriately.
•		Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.





## **Bumble Games**

VERSION: 1982

PRODUCER:

The Learning Company

4370 Alpine Road

Portola Valley, CA 94025

EVALUATION COMPLETED: May 1933 by the staff and constituents of TIES, Roseville, Minnesota.

COST: \$39.95

ABILITY\_LEVEL: Preschool through grade 5
SUBJECT: Mathematics
TOPIC: Arithmetic
MEDIUM\_OF\_TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: 48K Apple II or Apple
IIe, disk drive, monitor (preferrably color)
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Enrichment
INSTRUCTIONAL TECHNIQUES: Game, problem
solving

DOCUMENTATION AVAILABLE: Suggested grade/ability level(s), sample program output, program operating instructions.

TRUCTIONAL OBJECTIVES: Through problem solving games, the child learns the basic concept of working with number lines and grids.

INSTRUCTIONAL PREREQUISITES: It is assumed that the child has had experience with numbers and counting.

CONTENT AND STRUCTURE: The package consists of one disk and a games manual in a heavy cardboard folder. The program includes six games based on a progression from number lines to 10 x 10 grids.

ESTIMATED STUDENT TIME REQUIRED: The amount of time needed on each activity depends heavily on age and ability but a minimum of one half hour per activity should be allowed.

POTENTIAL USES: The package may be used as an individual or small group activity. Young readers will need help reading directions. The games may be used for reinforcing numeration concepts, for learning to use a grid, and for problem solving.

MAJOR STRENGTHS: The color graphics and sound are very effectively incorporated. The progression of skills from number line to 10 x 10 grid is logical and sequential. The program provides high motivation for practice in the use of grids and coordinates.

MAJOR WEAKNESSES: Once a number is entered as a coordinate in the game it cannot be changed. The back arrow does not erase entries.

OTHER COMMENTS: With all the fanfare, color and sound, one might expect more reward for finding the Bumble in the "FIND THE BUMBLE" game than "You found it."

#### **EVALUATION SUMMARY**

SA	A	$\mathbf{r}$	SD	N	Λ
J.A.	~	1,	JU	. 7	_

•	Content is accurate.
<b>-</b> +	Content has educational value.
•	Content is free of stereotypes.
	Purpose of package is well defined.
	Package achieves defined purpose
•	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately.
	Use of package is motivational.
•	Student creativity is effectively stimulated.
•	Feedback is effectively employed.

### SĀĀ D SD NĀ

	•	ł	Learner controls rate and sequence.
-	•		Instruction integrates with prior learning.
	ė		Learning can be generalized.
i		•	User support materials are comprehensive:
		Ť	User support materials are effective.
			Information displays are effective.
•			Users can operate easily and independently.
•	1		Teachers can employ package easily.
	•	Ţ	Computer capabilities are used appropriately.
•	Ť		Program is reliable in normal use.

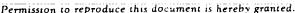
SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue Portland. Oregon 97204 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package:





# Alpine Skier

PRODUCER: Data Command, a Division of

Imperial International Education

P.O. Box 548

Kankakee, IL 60901

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$118.75

ABILITY LEVEL: Grades 6 through 8

SUBJECT: Language Arts

TOPIC: Reading

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II+, disk

drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation,

standard instruction.

INSTRUCTIONAL TECHNIQUES: Drill and

practice, tutorial, game

DOCUMENTATION AVAILABLE: In program instructional objectives, sample program output, teacher's information, student's instructions. In supplementary materials - program operating instructions, teacher's information.

INSTRUCTIONAL OBJECTIVES: (STATED) The programs are designed to improve reading comprehension skills by training the student to recognize a sentence as fact or opinion, tell if two sentences have the same or different

meanings, identify cause and effect, and determine which word or effect does not belong in a set of five choices.

INSTRUCTIONAL PREREQUISITES:

(INFERRED) Requires no prior knowledge by student and no prior preparation by teacher. However, the student must be able to read and follow directions.

CONTENT AND STRUCTURE: Package consists of a teacher's guide and four disks. The teacher's guide includes a chart for record keeping. Each of the four disks presents a brief explanation, example and drill on one of four subtopics of reading comprehension. These subtopics include determining fact and opinion, seeing cause and effect, categorizing words and phrases, and getting sentence meanings. The drill and practice instructional strategy is enhanced by a motivating game format. Correct responses. progress of alpine skier down a slope, and a preset number of points (8 out of 12) results in display of a prize trophy. Each program consists of 36 races - three rounds of 12 races each. At the completion of each round, the teacher may review the student's score and incorrect responses by typing CTRL-T (Apple II+ revision).

ESTIMATED STUDENT TIME REQUIRED: 15-30 minutes per day

POTENTIAL USES: The programs can be used for standard instruction and as a good way to

Continued on back

### **EVALUATION SUMMARY**

(503) 248-6800

SA	Ā	D	SDNA	·
	•			Content is accurate.
	•			Content has educational value.
_	•	<u> </u>		Content is free of stereotypes.
				Purpose of package is well defined.
	•			Package achieves defined purpose.
	•			Content presentation is clear and logical.
	•	_		Difficulty level is appropriate to audience.
Ve				Graphics/sound/color are used appropriately.
	ē	!		Use of package is motivational.
	_			Student creativity is effectively stimulated.
_	ē			Feedback is effectively employed.

Northwest Regional Educational Laboratory

300 S.W. Sixth Avenue Portland, Oregon 97204

	Learner controls rate and sequence.
	Instruction integrates with prior learning.
•	Learning can be generalized.
•	User support materials are comprehensive.
• _	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily:
	Computer capabilities are used appropriately.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Program is reliable in normal use.

Evaluators indicated that they would use or recommend use of this program with little or no change.



SA A D SD NA

Alpine Skier, continued

reinforce skills. It is most effectively used by an individual or small group. The record keeping and scoring would also lend itself to team competition.

MAJOR STRENGTHS: Graphics and game format make this package motivating and enjoyable. According to the teachers guide, the instructions and technical format make it elf-directing, self-correcting and easy to use by ooth teachers and students.

MAJOR WEAKNESSES: The same format for all four disks becomes repetitious after much use. Attempting all three rounds of each program would become either boring or frustrating for the very successful or very unsuccessful student.

OTHER COMMENTS: The entire package is motivating, enjoyable, and very easy to use. However, its best use should probably be on an individual or small group basis for short time periods.

**6**9

# Tennis Anyone?

PRODUCER: Data Command, a Division of

Imperial International Education

P.O. Box 548

Kankakee, IL 60901

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas:

COST: \$170.75

ABILITY LEVEL: Grades 4 through 6

SUBJECT: Language Arts TOPIC: Reading, Vocabulary

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II or Apple

H+, disk drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Enrichment INSTRUCTIONAL TECHNIQUES: Drill and

practice, tutorial, game

DOCUMENTATION AVAILABLE: In program and supplementary materials — instructional objectives, program operating instructions, teacher's information, student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) The student is required to add plural endings to singular words; to add prefixes to base words; to associate contractions with two word phrases; to identify the homonym for each word given; and to identify the base word from a fixed words.

INSTRUCTIONAL PREREQUISITES:

(INFERRED) It will be helpful if students have been exposed to the concepts presented in each program prior to interacting with the computer.

CONTENT AND STRUCTURE: The package has six diskettes and a teacher's guide. The screen format looks similar to a tennis court. A word, phrase, or base word is presented on one side of the tennis court. Depending on the stimulus, the student is to respond by entering the correct prefix, suffix, contraction, base word or plural ending. As soon as a response is made, the "ball" is served. If the response is correct, the serve is returned to the computer's court and the student scores. For an incorrect response, the ball passes through the student's court and the computer scores. Scoring is similar to the tennis game. Each program has six rounds in each match. At the end of each round, the student is shown the list of words used during the round and the correct responses. At the end of each match, the teacher may access a list of incorrect responses that were made by the student. However, this record is not permanently stored and will be lost if not retrieved immediately at the end of the match. Record sheets are found in ti.. teachers guide.

ESTIMATED STUDENT TIME REQUIRED: 10-15 minutes

POTENTIAL USES: The package could be used as a practice and/or review exercise once the

Continued on back

### EVALUATION SUMMARY

ŠÄ	À	Ç	SD:	ŇĀ
ē	-	:	1	Content is accurate.
•		•	1 1	Content has educational value
•		-		Content is free of stereotypes.
	ē	i		Purpose of package is well defined.
				Package achieves defined purpose:
	•		:	Content presentation is clear and logical.
	ē	!	<del></del>	Difficulty level is appropriate to audience.
	ē	•		Graphics/sound/color are used appropriately.
_	-		-	Use of package is motivational:
		-		Sciulent creativity is effectively stimulated.
_		•		Feidback is effectively employed.

SA A D SD NA

ē	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
. •	Learning can be generalized.
•	User support materials are comprehensive.
•	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
1.	Computer capabilities are used appropriately
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D. Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



### Tennis Anyone?, continued

students have been exposed to teacher-directed instruction on the concepts. Since a grade level is not indicated, flexibility is provided for classroom teachers to make the decisions concerning appropriate use. This package could be used in intermediate elementary grades or with special education students at the secondary level.

MAJUR STRENGTHS: The utilization of a simulated tennis game is highly motivational. The strongest feature, however, is the immediate response to the strident concerning a correct or incorrect researche. The visual and auditory feedback of the tennis ball is also accompanied by the most easwer over the student's response.

MARCH VEAKNESSES: The computer writes the correct response over the student's incorrect response, thereby erasing the student's response. It might be more appropriate for the student to be able to compare his response to the correct response. Also, there is no "permetent" record keeping system. During regular classroom use, it may be inconvenient for the teacher to retrieve information immediately after each student uses the program.

OTHER COMMENTS: An enhancement to the program would be to allow teachers to create their own word lists to be used in the games, and, to randomly generate the order of the words provided for a better check of understanding.

# Decimal Skills

PRODUCER:

Milton Bradley

Educational Division 443 Shaker Road

East Longmeadow, MA 01028

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$44.95

ABILITY\_LEVEL: Grades 5 through 9

SUBJECT: Mathematics

TOPIC: Arithmetic, mals

MEDIUM OF TRANSI ...: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II+, disk

drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, standard instruction, instructional management INSTRUCTIONAL TECHNIQUES: Drill and

practice, tutorial

program operating instructions, student's instructions. In supplementary materials—suggested grade/ability level(s), instructional objectives, prerequisite skills or activities program operating instructions, pre-test, post-test, teacher's information, student worksheets, follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED) The teachers guide specifies the types or problems a student is presented. They include: naming the place value of a specified digit; supplying the

numerical equivalent of a named decimal fraction; comparing and ordering decimal fractions; computing (+, -, X, /) decimal fractions.

INSTRUCTIONAL PREREQUISITES: (STATED)
Teacher demonstration of each mode is suggested by the guide. Teacher demonstration of the instruction mode would be necessary for the student to follow the computer program input directions. Whole number computation skills (addition, subtraction, multiplication and division) are, of course, necessary prerequisites for iecimal fraction computation.

ENT AND STRUCTURE: The package consists of one diskette, one guide, supplementary worksheets and tests. The content area is decimal concepts and computation. Readiness sub-skills of place value, names and numbers, comparing decidal fractions and ordering decimal fractions are tested in a speed drill format and correlated with worksheets. Computation with decimal fractions (addition, subtraction, multiplication and division) is available in three modes: practice, instruction and testing. In the practice mode, the computer presents a problem, and the student responds with an answer. The student may ask for the help function, which takes the student through the problem, step by step. The instruction mode leads the student through the algorithms for computation, and the testing mode provides a mastery quiz. Work on skills is supplemented by reproducible worksheets for instruction, practice

Continued on back

### **EVALUATION SUMMARY**

a. . B. SDNA

•			Content is accurate.
<u>-</u>			Content has educational value.
•			Content is free of stereotypes.
• ;			Purpose of package is well defined.
•		+ +-	Package achieves defined purpose.
		· · ·	Content presentation is clear and logica.
•			Difficulty level is appropriate to audience.
	•		Graphics/sound/color are used appropriately.
	ē		Use of package is motivational.
	_		Student creativity is effectively stimulated.
	<u>.</u>		Feedback is effectively employed.

	•		Learner contr. Is rate and sequence.
	•		Instruction integrates with prior learning.
_	•		Learning can be generalized.
•			User support materials are comprehensive.
•			User support materials are effective.
•			Information displays are effective.
		•	Users can operate easily and independently.
	•		Teachers can employ package easily:
	•		Computer capabilities are used appropriately
• [			Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



#### Decimal Skills, continued

and word problems. Mastery of skills other than readiness skills is tabulated by using a teacher management and record keeping section. Class and student record keeping forms are also included in the supplementary materials.

ESTIMATED STUDENT TIME REQUIRED: 15 minutes per day

POTENTIAL USES: This package provides drill and practice in traditional decimal fraction computation skills. The package should be used for individualized, computer-managed drill and practice.

MAJOR STRENGTHS: This is a well integrated instructional package which combines teacher record keeping and prescription modes with computer delivered drill and practice. It includes supplementary tests and worksheets.

MAJOR WEAKNESSES: Instructions to run the package are a little confusing. The objectives are not clear and defined. Inconsistent response is required to proceed to the next problem after answer is attempted. Program generally uses computer capabilities to check answers and keep class lists which is an under-use of the computer's potential.

OTHER COMMENTS: This package is a direct translation of traditional curriculum to computerized traditional curriculum.

# Elementary, Volume 6 — Social Studies

VERSION: 1.2

PRODUCER:

MECC

2520 Broadway Drive Lauderdale, MN 55113

EVALUATION COMPLETED: June 1983 by the staff and constituents of Linn-Benton County ESD, Albany, Oregon.

COST: \$41.00

ABILITY LEVEL: Grades 3 through 8

SUBJECT: Social Studies

TOPIC: Geography, History, Economics MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 32K, Apple II, single

disk drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Standard instruction INSTRUCTIONAL TECHNIQUES: Simulation, problem solving

DOCUMENTATION AVAILABLE: In supplementary materials - suggested grade/ability level(s), instructional objectives, rērēquisitē šķills or activities, sample program output, program operating instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) History knowledge and understanding, economics, problem solving

INSTRUCTIONAL PREREQUISITES: (INFERRED) Whole numbers and decimals (money) (+; -; x; /)

CONTENT AND STRUCTURE: The package contains 5 programs: FURS simulates a fur trader expedition; user must decide what furs to trade and where to trade. In NOMAD the user is given a city map and must try to drive to a given intersection. OREGON is an Oregon trail simulation. SUMERIA is a "Hamurabi" type simulation involving buying, selling and planting. VOYAGEUR is a simulation of a fur trader trip.

ESTIMATED STUDENT TIME REQUIRED: 15 minutes per program (minimum) for each of five on diskette, although 30 minutes for cach program would allow for group discussion and follow-up on lesson sheets.

POTENTIAL USES: Individual or small group setting with at least 30 minutes of uninterrupted time. This set of programs seems most appropriate for the upper elementary or middle school level, but could work well with some high school groups. Each program needs the support of the printed study guide sheets in the documentation.

MAJOR STRENGTHS: FURS has limited but realistic student choices. The background information and map in the documentation are good. NOMAD involves coordination of the speed and direction variables. OREGON incorporates effective graphics. Several choices are available and the simulation is reasonable with realistic consequences. SUMERIA requires students to hold several variables in consideration and offers

Continued on back

#### **EVALUATION SUMMARY**

ŜĀ	Α	D	SDN	IA, <del></del>
	•			Content is accurate.
	-			Content has aducational value.
	-			Content is free of stereorypes.
	•			Purpose of Jackage is well defined.
	•			Package ach eves defined purpose.
-	_			Content presentation is clear and logical.
•		_	1.	Difficulty level is appropriate to audience.
_		•		Graphics/sou Alot are used appropriately.
	ē			Use of package is tryational.
ē	-			Student creativity is effectively stimulated.
-ē-				Feedback is effectively employed.

	•	Ī		NA.	Learner controls rate and sequence.
_	•				Instruction integrates with prior learning.
•					Learning can be generalized.
•				1 1	User support materials are comprehensive.
•					User support materials are effective.
	-		ļ		Information displays are effective.
,					Users can operate easily and independently.
	ē			1 1	Teachers can employ package easily.
	•				Computer capabilities are used appropriately
	•	<u> </u>		$\Box$	Program is reliable in normal use.

Evaluators indicated that they would use or recommend use of this package with little or no change.



several lesser possibilities. VOYAGEUR is the best of the five simulations for strategy.

MAJOR WEAKNESSES: FURS has limited screen instructions. The price differences for various pelts need clear definition. In NOMAD the screen should show R, L, U, F command abbreviations. OREGON causes music overload! This could be a distraction in groups involved in mixed tasks. SUMERIA is repetitive. The students may "try" to starve the population to add excitement. VOYAGEUR also has distracting music (see OREGON) which could be a drawback with mixed task classes. It also needs more complete geographic information.

OTHER COMMENTS: The best feature of the FURS program is that the students are not allowed to cheat on pelt distribution. The documentation is necessary in order to understand the maps in NOMAD. The probability statements in the documentation for OREGON are helpful in understanding the program structure. The documentation for SUMERIA is the most helpful. The VOYAGEUR program allows for outside research (study guides).

# Mathematics Assessment/Prescriptive Program, Levels 5-7

VERSION: 1982

PRODUCER:

Reader's Digest Services, Inc.

Educational Division Pleasantville, NY 10570

EVALUATION COMPLETED: May, 1983 by the staff and constituents of Region IV ISC, Houston, Texas

COST: \$129:90 per level

ABILITY LEVEL: Grades 5 through 7

SUBJECT: Mathematics

TOPIC: Arithmetic

MEDIUM OF TRANSFER: 5-1/4 in disk REQUIRED HARDWARE: 48K Apple II+, one disk drive, color or black/white monitor REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, assessment, instructional management INSTRUCTIONAL TECHNIQUES: Drill and practice

DOCUMENTATION AVAILABLE: In program suggested grade/ability level(s), instructional objectives, pre-test, post-test, student's instructions, and follow-up activities. In supplementary materials - suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, resource/reference information, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED) The objectives for the total package (which includes Levels 1-7) are stated in behavioral terms and listed in the documentation. All objectives increase in difficulty. Some of those listed for Levels 5-7 include topics such as: Roman numerals, translation of word sentences into mathematical sentences, fractions, decimals and elements of geometry. There is no option for input of additional objectives.

INSTRUCTIONAL PREREQUISITES: (INFERRED) It is assumed that students have certain skills mastered prior to using the Edu-Disks. Warning: a student who does poorly may not have experienced conceptual development from a hands-on level and therefore may have difficulty working abstractly.

CONTENT AND STRUCTURE: Each level has two disks - an administrative disk and a program disk. The administrative disk allows the teacher to use the program disk to create class lists, retrieve student scures, and make assignments. The program disk is used by the student to assess skills or to work on individual assignments.

ESTIMATED STUDENT TIME REQUIRED: Students will need 10-15 minutes to complete each lesson.

POTENTIAL USES: The package can be used to assess a student's progress against objectives pre-defined by Reader's Digest. Once the

Continued on back

#### **EVALUATION SUMMARY**

ŜΑ	Ā	D	SD NÄ	
	•			Content is accurate.
	ين			Content has educational value.
•				Content is free of stereotypes.
		_		Purpose of package is well defined.
	ē		1 - 1	Package achieves defined purpose.
-	•	!	1 1	Content presentation is clear and logical.
	•			Difficulty level is appropriate to audience.
			- I	Graphics/sound/color are used appropriately.
—		•		Uso of package is motivational.
!		-	Ī	Student creativity is effectively stimulated.
			<u> </u>	Feedback is effectively employed.

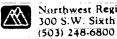
•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized.
6	User support materials are comprehensive.
•	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately.
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.

73

SA. A. D. SD.NA.



# micro SIFT COURSEWARE EVALUATION

Mathematics Assessment/Precriptive Program, continued

identify objectives to be included in the assignments given to that pupil. The pupil then works through exercises developed by the computer designed to build skills necessary to master specific objectives assigned to the student by the teacher.

MAJOR STRENGTHS: The program provides a non-threatening test situation that allows a student to work at his own pace. The teacher is provided with areas that the student appears to be weak in and the program allows the teacher to make individual assignments for each student to be stored on the disk. The computer, then, is an "individualized instructor" for each child. Work which has been mastered can be eliminated from the student's assignment sheet.

MAJOR WEAKNESSES: When a student procedes through the prescriptive section, very little is done for the student who misses the problems. The computer should be able to "back-up" until it reaches the level of instruction that is appropriate for that student. In order for a teacher to "try-out" this program, he must enter a dummy class roster. Pencil and paper is required leaving the computer idle much of the time. The program has no tutorial function.

### President Elect

VERSION: 1981

PRODUCER: Strategic Simulations, Inc.

465 Fairchild Drive, Suite 108

Mountain View, CA 94043

EVALUATION COMPLETED: May 1983 by the staff and constituents of the Connecticut Department of Education, Hartford, Connecticut.

COST: \$39.95

ABILITY LEVEL: Grades 5 through 10 SUBJECT: History, Social Studies TOPIC: Government, Civics, Elections MEDIUM OF TRANSFER: 5-1/4 in. disk REQUIRED HARDWARE: 48K Apple II, single disk drive, monitor REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Enrichment INSTRUCTIONAL TECHNIQUES: Game, simulation

DOCUMENTATION AVAILABLE: In supplementary materials — program operating instructions, students instructions, and student worksheets

INSTRUCTIONAL OBJECTIVES: (INFERRED) To understand the factors that affect the presidential election.

INSTRUCTIONAL PREREQUISITES: (INFERRED) An understanding of the presidential election process.

CONTENT AND STRUCTURE: This program simulates the 9-week presidential campaigns from 1960 to 1984 using either actual historical data or potential candidates or allows user to create his own candidate.

ESTIMATED STUDENT TIME REQUIRED: A minimum of 2-1/2 to 3 weeks of class time would be needed. This may present a limitation as many curricula, even in government/civics classes, would not allow this much time to be spent on the subject of presidential elections. At least one week of preparation is needed in order for students to learn enough about the process from the manual and other resources. One round of play lasts about 30 minutes—it would take about four hours or five class days to complete the game. Debriefing, analyses and evaluation of performance would take another three to five days.

potential uses: President Elect is a must game to play during a presidential election year, though its potential extends well beyond that limited use. It can be played by individuals and small groups, both in class or in a resource room during class time or after school. Elective courses in contemporary issues, law, and political science would be appropriate places for using this simulation.

MAJOR STRENGTHS: The supplementary information book is excellent. Flexibility of the historical and ahistorical modes is a plus. The package is creative in that present and near future elections can be played as well as past

Continued on back

#### **EVALUATION SUMMARY**

SA	Ā	_D	SDNA	
	ė		$\sqsubseteq dot$	Content is accurate.
ē				Content has educational value.
	ā			Content is free of stereotypes.
•	_	Ļ		Purpose of package is well defined.
	Ē			Package achieves defined purpose.
	٠	<u> </u>		Content presentation is clear and logical.
	•		+ 1	Difficulty level is appropriate to audience.
				Graphics/sound/color are used appropriately.
•		į		Use of package is motivational.
		<del>-</del> -		Student creativity is effectively stimulated.
_	•	•		Feedback is effectively employed.

Α	D	SD	<u>,NA</u> ,	
•				Learner controls rate and sequence.
			•	Instruction integrates with prior learning.
•				Learning can be generalized.
				User support materials are comprehensive.
		1		User support materials are effective.
•	•			Information displays are effective:
•				Users can operate easily and independently.
ē			1	Teachers can employ package casily
ē				Computer capabilities are used appropriately.
ē			$\Box$	Program is reliable in normal use.
	A	A D	A D SD	A D SD NA

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



President E. , continued

elections. The package provided reflicte for researching the political potential, coaracter and positions of the candidates.

MAJOR WEAKNESSES: The game is one. Black and white graphics could be improved. It is hard to detect the state by state changes after a player moves as only percentages are given (the names of the states should be printed on the map for easy recognition).

OTHER COMMENTS: Print out capability would improve the game. Students could take home maps and information as homework, so that strategies could be thought out more carefully before their turn at the computer the next day in school. A 1984 update (historical track) made available to original purchasers would appreciably add to the game's attractiveness.

### **Career Directions**

PRODUCER:

Systems Design Associates 723 Kanawha Boulevard East

Charleston, WV 25301

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$59.95

ABILITY LEVEL: Grade 11 through postsecondary SUBJECT: Vocational Education
TOPIC: Career education, Guidance
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARL: 48K Apple II+, one or
two disk drives, monitor, printer (optional)
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard
instruction, assessment
INSTRUCTIONAL TECHNIQUES: Information
retrieval, career guidance

DOCUMENTATION AVAILABLE: In program—student's instructions. In supplementary materials—instructional objectives, sample program output, program operating instructions, teacher's information, resource/reference information, student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED' This system allows the student to find out what his/her career interests are, determine what jobs relate to his/her career interests and abilities, and develop an orderly plan to enter or prepare to enter an occupation.

INSTRUCTIONAL FREE QUISITES:
(LIFERRED) A decree of work-readiness.
Willingness and abates of user to plan and make decisions about what he/she wants to do.

CONTENT AND STRUCTURE: The program is : divided into three major sections: 1) career assessment - here the user defines his/her career interests by completing a series of questions about such things as types of work, activities, school areas of study, etc.; 2) career analysis the computer searches a data base of hundreds of occupations and lists those that correspond to the user's career interests and abilities; 3) career planning - provides guidelines to help choose an appropriate vocational school or college and conducting a job search. The system stores career interests and objectives for up to five persons, thus allowing the user to complete some sections and return to the computer at a later time to complete additional sections.

ESTIMATED STUDENT TIME REQUIRED: To complete all sections would probably take 2-3 hours. Thirty minute sessions could be scheduled.

POTENTIAL USES: This program could be used by the school counselors or in any class that deals with occupational education or career guidance.

MAJOR STRENGTHS: The program is easy to use and provides re-entry capability so that the student doesn't have to start from the beginning

Continued on back

#### **EVALUATION SUMMARY**

SA	Ā	Ð	SD.	NA
	•			Content is accurate.
	•			Content has educational value.
	•			Content is tree of stereotypes.
	•			Purpose of package is well defined.
	•	i		Package achieves defined purpose.
	•	<u> </u>	1	Content presentation is clear and logical.
	•			Difficulty level is appropriate to audience.
	•	$\vdash$		Graphics/sound/color are used appropriately:
	•			Use of package is motivational.
_	•		† †	Student creativity is effectively stimulated.
$\neg$	•	-		Feedback is effectively employed.

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized.
•	User support materials are comprehensive.
•	User support materials are effective.
	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can'employ package easily.
•	Computer capabilities are used appropriately
	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



#### Career Directions, continued

each time. The program also provides plenty of opportunities for the student to change his mind about choices he has made. This program would be valuable to junior high or high school students.

MAJOR WEAKNESSES: Some of the job descriptions are very similar which may prove to be boring. More detailed job descriptions should be included; however, in many cases, the screens are already overcrowded. The program wouldn't print on one evaluator's Apple letter quality printer.

OTHER COMMENTS: It would be valuable to include more information about training (such as names of schools). More graphics and color should be used.

# Cloze Plus (Context Analysis)

VERSION: Level C1-C4

PRODUCER: Milliken Publishing Company

1100 Research Boulevard St. Louis, MO 63132

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$156.00

ABILITY LEVEL: Grade 3 SUBJECT: Language Arts

TOPIC: Reading

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II, disk

drive, monitor

REQUIRED SOFTWARE: Applesoft in ROM, DOS

3.3

INSTRUCTIONAL PURPOSE: Remediation, standard instruction, enrichment, instructional management

INSTRUCTIONAL TECHNIQUES: Drill and

practice.

program operating instructions, teacher's information, student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, sample program, program arating instructions, teacher's information, rescarce/reference information, student's instructions, removable card on how to operate the computer.

INSTRUCTIONAL OBJECTIVES: (ST. ED) This is a computer-based reading improve ent program that develops comprehension and vocabulary knowledge through structured context-analysis activities. It develops the ability to integrate meaning across sentences, the ability to understand an extended passage, literal and inferential comprehension skills, the ability to use a variety of contextual analysis strategies, predictive abilities, and test-taking techniques.

INSTRUCTIONAL FREREQUISITES: (STATED)
The manual states that lessons are set up in such a way that no prerequisite activities are needed;
however, a certain level of reading is assumed.

CONTENT AND STRUCTURE: The package evaluated consists of a teacher's guide and a set of four diskettes. The complete series is made up of six sets of diskettes spanning reading levels 3-8. There are five lessons on each diskette and a management system which can hold records for as many as five classes totaling not more than 100 students. Each lesson uses the Cloze technique and many context vocabulary activities to check the student's comprehension and vocabulary skills. The student is given 7-12 paragraphs to read and supply a missing word or think up an appropriate word that fits the meaning in the context of each paragraph. There are two chances to answer and one available clue for each paragraph. The reward for a right answer is a verbal (on the screen) "pat on the back" followed by a partially hidden picture

Continued on back

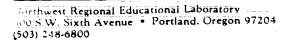
#### **EVALUATION SUMMARY**

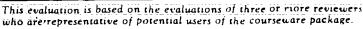
SA A D SD	<u> </u>
	Content is accurate.
•	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
•	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
	Graphics/sound/color are used appropriately.
•	Use of package is motivational.
••	Student creativity is effectively stimulated.
•	Feedback is effectively employed.

ŠΑ	Ä	D SD NA	
	ē		Learner controls rate and sequence.
	•		Instruction integrates with prior learning.
	ē		Learning can be generalized.
ē			User support materials are comprehensive.
•			User support materials are effective.
	•		Information displays are effective.
ē		-   -	Users can operate easily and independently.
ē			Teachers can employ package easily.
_	ë		Computer capabilities are used appropriately.
ē	_		Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

valuators indicated that they would use or recommend use of this package with little or no change.







# . - Isiet courseware evaluation

Análýšiš), continued

. Tighthas another section uncovered for each ederect miswer. At the end lesson, the student is given his her score and a table of skills showing which ones have been lressed in that particular exercise. The score are also recorded on the askette and may be retrieved later by the reacher. Students may not get into the management system nor may one student complete another student's exercises thanks to a double par sword system. The teacher's guide neludes a complete explanation of the instructional content, the Cloze technique, the management system, and step-by-step operating procedures with samples of screen displays. there are also ditto masters for student record newts and an "Easy-Does-It" card in heavy der mourd giving computer operating instructions and man by posted near the computer in case stalen nedd â duiek reminder.

STEWARDS STUDENT TIME REQUIRED: 10-15 was at desision for regular students; 15-20 was a water tion students.

ENTIME USES: The package could be used to regular students or assure they had reached an independent level in handling material at specific to is and its adultional drill and practice for

MAJOR STRENGTHS: The program is easy to use and the content is good. Each lesson has 7-12 paragraphs which give a good test of student's comprehension. Using words that could potentially all fit makes students really examine the whole context paragraph. Being able to obtain a hint is good and varied types of responses being requested will keep the program interesting. The documentation is excellent.

MAJOR WEAKNESSES: The lessons were we constructed from the skills standpoint; but so of the subject matter wasn't geared to third grade interests as it might have been. The program should have some (optional) sound effects if the student answers correctly:

OTHER COMMENTS: The program gives a report of the students progress on the screen at the end of the lesson. It is designed for the student to copy the numbers onto a report form which is included in the supplementary materials. However, the information on the screen uses language appropriate for the teacher, but difficult for third graders. The word PROGRAMMING on the title page almost looks like PROGRAMMING!

# The Westing Gank

VERSION: 1982

PRODUCER:

Sunburst Communications 39 Washington Avenue Pleasantville, NY 10570

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

C ST: \$25.00

ABILITY LEVEL: Grades 5 through 8
SUBJECT: Language Arts
TOPIC: Reading
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWAR: Apple II+, disk drive,
monitor, printer (optional); also available for the
TRS-80 and PET
EQUIRED SOFTWARE: Applesoft, DOS 3:3
INSTRUCTIONAL PURPOSE: Enrichment
INSTRUCTIONAL TECHNIQUES: Drill and
practice; game

program operating instructions, student's instructions. In supplementary materials—suggested grace/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, resource/reference information, student's instructions, textbook correlation.

INSTRUCTIONAL OBJECTIVES: (STATED) The pojectives of the program are: to combine

exposure to the best in children's literature with reading skills practice; to stimulate and motivate students through high-interest material and microcomputer experience; to build and reinforce comprehension and vocabulary skills; to provide a successful learning experience; and to make reading a pleasurable experience for the non-motivated reader.

INSTRUCTIONAL PREREQUISITES: (STATED)
The student must read the selected book; other optional activities prior to using the computer are suggested in the documentation. At least a third grade reading level is required.

content and structure: The four programs on the disk are designed to test and reinforce vocabulary, comprehension, and sequence skills. Students receive immediate feedback as they respond to questions and usually get a second try. A performance summary is displayed at the end of each program (either on the screen or on a printer): his package is one of a series of 15 packages

Content four programs on the four program (either on the screen or on a printer): his package is one of a series of 15 packages

Correlate with 15 Newbery Award winnights books.

ESTIMATED STUDENT TIME SQUIRED: 10-20 minutes per day for four days

POTENTIAL USES: This program ca. be used as a quick check to see if the student did read the book, as a fun competition to see who read it the most carefully, or as a motivation for the student to read more books in order to get to use the

Continued on back

#### **EVALUATION SUMMARY**

The second secon

SA/A = D/SI	NA
6	Content is accurate.
	Content has educational value
•	Content is free of stereotypes.
4	Purpose of package is well defined:
•	Package achie i defined purpose.
÷	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
	Graphics/sound/color are used appropriately
	Use of package is motivational.
	Stildent creativity is effectively stimulated.
. 0	Feedback is effectively employed.

	c		ţ	Learner controls three and sequence,
•	-			Instruction integrates with prior learning.
	0		-	Learning can be generalized.
-	e	i	i	User support materials are comprehensive.

SA. A. D SD NA

•	; i	Learning can be generalized.
•	Ĭ	User support materials are comprehensive.
•		User support materials are effective.
0		Information displays are effective.
•		Users can operate easily and independently.
•		Teachers can employ package easily.
		Computer capabilities are used appropriately.
	+	Pengenm is cellable in normal use

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

unitors indicated that they would use or recommend use of this package with little or no change.



The Westing Game, continued

n. As a group exercise, the computer at out the need for careful progrām w... reading in order to increase comprehension.

MAJOR STRENGTHS: The documentation is good and the program is easy to use. The price is right and the lifetime grarantee is great. This program uses interesting and varied approaches to comprehension and vocabulary. It is act to make the skimmer realize a need to deed more carefully. This package meets the great need for good recreational as ding follow-up that is not overly pedantic yet really checks out the reader. -

MAJOR WEAKNESSES: At some points, the only way to get out of the program and turn off the computer. The most serious weakness was the failure to use graphics and sound capabilities.

# Read and Solve Math Problems

VERSION: 1981

PRODUCTE:

Educational Activities, les

P.O. Box 392

Freeport, NY 11520

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$98,00

ABILITY LEVEL: Grades 3 through 6
SUBJECT: Mathematics
TOPIC: World Problems
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: 32K Apple II of Apple
II\*, one disk drive; monitor
REQUIRED SOFTWARE: Applesoft; DOS:
INSTRUCTIONAL PURPOSE: Remediation
INSTRUCTIONAL TECHNIQUES: Drill and
practice; tutorial

student's instructions. In supplementary materials — instructional objectives, program operating instruction, pre-tait, post-test teacher's information, student worksheet...

INSTRUCTIONAL OBJECT VES: (STATED) The student will be able to identify key words in addition problems; locate key words in subtraction or addition problems; write equations; use equations to solve addition or subtraction problems; where addition, subtraction,

multiplication and division problems using equations; work with problems without numbers.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Student should have a minimum reading ability of third or fourth grade level. Student must be able to compute solutions to addition, subtraction, multiplication and division problems.

consists of two diskettes and fourteen reproducible activity masters: Each disk has five lessons which increase in difficulty: Each lesson because with a tutorial section explaining what they words are and what each means. Students are then presented with one verbal problem at a time. During the initial lessons, the student is only required to choose the key words and the correct of the constant of the student is also required to the sequation and find the solution. In student is response is incorrect, the program provides a mint" to the student. Then, if the next response is incorrect, the computer will show the correct response to the student.

ESTIMATED STUDENT THE REQUIRED: 10-15 minutes per day

POTENTIAL USES: The p. chage could be used individually or in small groups as a remediate redril and practice lesson.

MAJOR STRENGTHS: The program makes good

+ ontinued on back

#### EVALUATION SUMMARY

	Content is accurate.		Learning ontrols rate and sequence.
<u></u>	Confent has educational value.	0	Instruction integrates we apprior learning.
•	Content is tree of stereotypes.		Learning can be generalized.
5	Purpose of package is well defined:	4	User support materials are comprehensive
	Package achieves defined purpose	•	User support materials are effective
	Content presentation is clear and logical.		Information displays are effective
ē	Difficulty level is appropriate to audience	*	Users can operate easily and independently
ö	Graphics soul : color are used appropriately		I nachers can employ package easily
· · · ·	('se of package is motivational.	φ.	Computer capabilities are used appropriately
	- Student creativity is effectively stimulated.		Drogram is reliable in normal use
	Feedback is effectively employed.		A-Agree 1) Disagree (1) Changing Proc. 1999 (2007)

Evaluators - Accred that they would not use or recon mend this package.



# micro SIFT COURSEWARE EVALUATION

Read and Solve Math Problems, continued

use of positive feedback that is randomly generated and eye-catching. Also, the student is not frustrated by repeating an incorrect response more than twice, because the program provides the correct response at that point:

iniddle of MAJOR WEAKNESSES: Exiting in t the program is not an option. Instructions regarding expected student resp are not clear. Program does not accepelled. words. Later programs should : nore flexibility in the acceptance of aden 31 answers. Structured responses initially are necessary, but steps could be deleted or combined later. The biggest problem with the program is the content. In order to fully develop problem solving skills in students, reliance on key words can be detrimental. Although key word recognition will work for the majority of textbook verbal problems, it is possible to develop problems whereby key words do not work. Research studies have confirmed that the use of key word identification does not produce students with increased problem solving skills. Therefore it is not a good instructional strategy to rely totally on key words.

# Word Memory Program

ALRSION: Scott Foresman Reading

Instructional Communications PROGRESS A

The inology, Inc. (I/CT)

10 Stepar Place

Buntington Station, NY 11746

EVALUATION COMPLETED: June 1983 by the sould and constituents of Region IV ISC, Houston, Texas.

COST: \$65.00

ABILITY EFVEL: Grade L SUBJECT: Language Arts TOPIC: Reading MEDIUM OF TRANSFER: 5 : in disk REQUIRED HARDWARE: 48 Apple II+, single disk drive, monitor REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTION IL PURPOSE: Remediation, standard instruction, instructional management INSTRUCTIONAL TECHNIQUES: Drill and pirate to see

DOCUMENTATION & MINABLE: In program ir supplementary student's in true materials — sug: crade/ability level(s); instructional objective : prerequisite skills or activities sample program outcut; program instructions, teacher's information. resource reference information; textbook correlation:

INSTRUCTIONAL OBJECTIVES: (STATED) The Word Memory Program is designed to help

beginning readers become more fluent silent readers. It reinforces basic reading skills and vocabulary. The programs are correlated to first year basal reading programs.

INSTRUCTIONAL PREREQUISITES: (STATED) Student must be able to follow directions, have an attention span of at least 3 to 4 minutes in duration, be able to find letters and numerals on the keyboard, and have completed the basal activities correlated to program lessons.

CONTENT AND STRUCTURE: In each lesson the teacher makes individual or group assignments and controls scan and flash rates as well as other variables. In each lesson, students will search for target words in a word scan exercise. In addition, word flash exercise will require the student to correctly type the target word flashed. Words missed during Word Scan or Word Flash will be presented in subsequent Word Memory practice before new lesson words are presented.

ESTIMATED STUDENT TIME REQUIRED: 15-20 minutes per day. One to three word memory sessions per week are recommended.

POINTIAL USES: The program should be used with individuals or small groups after basal activities have been completed. This drill and practi e program could also be used with older beginning rolliers and would be effective for special education and English as a Second Language students.

Continued on buck

#### 25 ALC ALION SUMMARY

	Content is accurate.		•	Learner controls rare and sequence.
	Content has educational value.	•		Instruction integrates with prior learning.
	Content is free of stereotypes.	•		Learning can be generalized.
	Purpose of package is well defined.	•		User support materials are comprehensive.
	Package achie defined purpose			User support rapterials are effective
	Content presentation is clear and le rical.			Information displays are effective.
	Difficulty level is appropriate to audience	z.		Users can operate easily and independently.
	Graphics sound color are used appropriately	•		Teachers can employ package easily.
	Use or package is motivational.			Computer capabilities are used appropriately
. <u>.</u>	Student creativity is effectively stimulated	5		Program is reliable in normal use.
• • •	idback is effectively employed.	. A . Str.	ngis Serge 1-	Agree Co-Disagree SL our gas Disagree Nove Sar Sapple

-2/\1	- D ST	7.40	
		•	Learner controls rate and sequence.
0			Instruction integrates with prior learning.
		1	Learning can be generalized.
•			User support materials are comprehensive.
			User support materials are effective
			Information displays are effective.
. + -		• •	Users can operate easily and independently.
•			Teachers can employ package easily.
•	• •		Computer capabilities are used appropriately
5	• •		Program is reliable in normal use.

to comite, sincreated that they would highly recommend this package.



Word Memory Program, Continued

MAJOR STRENGTHS: The manual is well written and easy to follow. The management (teacher assignment) system is easy to use. This program allows young students to actively get involved in the learning process. The list of "hard" and "easy" words provides visual reinforcement of what has been done and what needs to be done. Although the leacher controls the rate the student can decide whether to use Word Scan and Word Flash:

MA. )R WEAKNESSES: Recordkeeping needs to be expanded to maintain a record of items correct/incorrect.

OTHER COMMENTS: This program would work well with Special Education students who are beginning to read as well as with all beginning readers:

# Rhymes and Riddles

PRODUCER:

Spinnaker Software 215 First Street Cambridge; MA 02142

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$29.95

ABILITY LEVEL: Preschool through grade 4
\$CBJECT: Länguäge Arts
TOPIC: Spelling; Reading, Grammar, Vocabulary
MEDIUM OF TRANSFER: 5-1/4 in disk
RLQUIP ED HARDWARE: 48K Apple II+; disk drive;
monitor
REQUIRED SOFTWARE: Applesoft; DOS 3:3
INSTRUCTIONAL PURPOSE: Enrichment
INSTRUCTIONAL TECHNIQUES: Game, problem solving

DOCUMENTATION AVAILABLE 'n program — student's instructions: In supplementary a merials — suggested grade apility levels program operating instructions, student's instructions;

INSTRUCTIONAL OBJECTIVES: (STATED) The student will: learn spelling; reading, grammus and "the value of context"; learn keyboarding skills (location of letters); and mann normally thy mes and fundous sayings.

INSTRUCTIONAL user mu i have a instructions, until

TES: (INFERRED) Child able to read simple injectives the instructions:

CONTENT AND STA TURE: Package consists on the diskette with easy to read manual. The child interacts with the program by pressing letters on the keyboard to fill in blanks on the second. The completed planks form pursery thymes, famous sayings and the ariswers to readles. Pressing six wrong letters in any game will result in the computer providing the answer. No record keeping or reporting functions are provided, nor are they needed, for the program is to be used for enrichment and/or "fun".

ESTIMATED STUDENT TIME REQUIRED: Time need would vary widely with the individual child: Famous sayings and riddles might be learned by an average 7-8 year old in 10-15 minutes per day for five days: Since there are over 100 riddles, the interest of the child yould determine how long he/she would work with the program.

 $\overline{POTENTI}_{i}$  . USES: Individual or small group activity for enrich i int.

MAIRSTE GTHS: Graphics and sound are delightful privating and rewarding. Children will really enjoy the collect and sharing them with friends:

MAJOR WEAKNESSES: Preschoolers will need adult help until they memorize the instructions. The program can be frustrating, leading to merely pressing letters to get to arry are and music. The package is essentially an elaborate version of Hangmar", used with riddles, rhymes and famous sayings:

OTHER COMMENTS: A fun program for children, especially those with a good sense of humor. This program is a fun way for children to use the computer. They will learn about the keyboard and spelling, as well as rhymes, riodles and famous sayings.

#### EVALUATION SUMMARY

$\frac{\Delta}{\Delta} \frac{\Delta}{D} \frac{D}{z}$	SD NA =
·	Content_is_accurate.
ō	Content has education value.
ä	Content is free of the vpes.
	Purpose of package all defined:
•	Package achieves L. ied purposel .
,	Content presentation is clear and logical.
	Difficulty level is appropriate to audience.
•	Graphics/sound/color are used appropriately
	Use of package is motivational.
	Student creativity is effectively stimulated.
	medback is effectively employed.

•	Learner controls rate and sequence.
e	Instruction integrates with prior learning.
•	Learning can be generalized.
	User support materials are comprehensive.
	<ul> <li>User support materials are effective.</li> </ul>
	Information displays are effective.
•	Users can operate easily and independently.
. •	Teachers can employ package easily.
9	Computer capabilities are used appropriately
· · ·	Program is reliable in normal use.

positors indicated that they would use or recommend use of this package with little or no change.



..... the lovement is hereby granted.

\_\_\_\_\_

# Jos anulary Skills: Profixes, Suffixes and Root Words

A CONTROL MIL ON Bradley - Secret chal Division 140 Sec. Coad

C . 1 42 Sadow: MA 00023

ET ALEATION COMPLETED: June 1983 by the staff and contituents of Region IV ISC; Houston, Texas.

COST: \$44.95

ABILITY LEVEL: Wides 6 through 9

SUBJECT: Language Arts

TOPIC: Vocabulary

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II+; disk drive;

monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3

INSTRUCTIONAL PURPOSE: Remediation, standard

instruction, instructional management

INSTRUCTIONAL TECHNIQUES: Drill and practice;

tutorial, game

DOCUMENTATION AVAILABLE: In program - teacher's information, student's instructions. In supplementary materials - suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, pre-test, post-test, teacher's information, resource/reference information, student worksheets. follow-up activities.

INSTRUCTIONAL OBJECTIVES: (INFERRED) The student will be able to identify and understand prefixes, suffixes, and root words.

INSTRUCTIONAL PROREQUISITES: (INFERRED) The user should have some idea of word structure before using the backage

ONTENT AND STRUCTURE: The student is diagnosed through a written test provided in this package; and classification of V. U. arieus). P (Practice), or I

(Instruction) are entered into the student record manager. These classifications determine what type of instruction the computer will give the student in various skills: In this vocabulary program, six specific drills are covered. A review drill which contains the video game "Alien Raiders" is also included. Once students have mastered all skills, they are given a final written (included in package) mastery test. In addition to reproducible worksheets and tests, class record sheets and student record worksheets are included in the package. Scores are recorded on these sheets rather than on the computer. Only assignments are recorded on the computer.

ESTIMATED STUDENT TI REQUIRED: 15 minutes per day in a specific skill area.

POTENTIAL USES: After presentation by the teacher, this is an excellent way to reinforce skills in an interesting manner. It would also be good as a quick review before a test. The package would probably be used hest on an individual basis:

NAJOR STRENGTHS: The graphics and sound are good: The student has control over the pace of the presentation of the subject matter. The ability to earn time to play the game is motivating for the student user. The teacher has control over material being presented. Worksheets, tests and score sheets are provided:

MAJOR WEAKNESSES: None cited:

OTHER COMMENTS: This program could be used with education resource room students at the secondary

#### EVALUATION SUMMARY

All Carrier and St. 11 cm.

at the state of

SA / D SD	NA
G	Content is accurate.
•	Content has educational value.
6	Contest is free of stereotypes.
•	Purpose of package is well defined.
. • .	Package achieves defined purpose.
	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
	Graphies/sound-color are used appropriately.
	Usē ot pāckage is motivational.
	Student creativity is effectively stimulated.
	Feedback is effectively employed.

0		ļ	1	Learner controls rate and sequence.
	•		Ī	our action integrates with prior learning.
	•		-	Learning can be generalized.
	0		!	 User support materials are comprehensive.
	0	:		 User support materials are effective.
	c		-	 Information displays are effective.
œ			:	Users can operate easily and independencly.
	•		1	 Teachers can employ package easi
	. •		•	 Computer capabilities are used appropriately
	•			 Program is reliable in normal use.

Evaluators incleated that they would use or recommend use of this package with little or no courge.



# Vocabulary Skills: Context Clues

PRO Pro .: Wilton Bradley

Ecucational Division 443 Shaker Road

East Long Deadow, MA 01028

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC; Houston; Texas.

COST: \$44:95

ABILITY LEVEL: Grades 5 through 9

SUBJECT: Language Arts

COPIC: Reading

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II+, disk drive,

REQUIRED SOFTWARE: Applesoft, DOS 3:3 INSTRUCTIONAL PURPOSE: Remediation, standard instruction, enrichment, assessment, instructional

INSTRUCTIONAL PECHNIQUES: Drill and practice;

tutorial, game

DOCUMENTATION AVAILABLE: In program - sample program output. Program operating instructions, post-test; teacher's information; student's instructions. In supplementary materials — suggested grade/ability invel(s), instructional objectives, prerequisite skills or tivities program of grating instructions, post-test, temener's infor ation; resource/reference information; student's instructions, student worksheets, follow-up activities:

INSTRUCTIONAL OB ECTIVES: (STATED) To present strategies which students can use to get word meanings from context. The strategies presented are: working with context, definition, contrast, educated guesses and exambles.

HISTR' THOMAL PREREQUISITES: (INFERRED Regaing at it or mediate level (at least 5th grade).

The second section of the second seco

CONTENT AND STRUCTURE: The package consists of one diskette, reproducible worksheets and tests, and an accompanying manual: General program is: 1) instruction, 2) practice, 3) mastery quiz. A teacher management record keeping system is included which ällows individual placement.

ESTIMATED STUDENT TIME REQUIRED: 10-15 minutes per dav

POTENTIAL USES: This is an excellent drill and practice package which reinfores related instruction for an average intermediate reader.

MAJOR STRENGTHS: The package is user friendly and easy to follow. It is motivational. Immediate reinforcement is provided. The program uses a variety of "praise" words along with sound. Earning time to play Alien Raiders in a great motivator to do well. Student controlled rate and unified theme of presentation are strengths. The choice of an optional review is a plus. is the record keeping system.

MAJOR WEAKNESSES: The reading vocabulary may be high for the intended audience, but if the student is reading at intermediate level he/she could probably handle it. The fairy tale story content is long. Sentences are long, and sometimes very complex. Passwords and other commands could be displayed on the monit it.

OTHER COMMENTS: More practice samples would be heipful.

#### EVALUATION SUMMARY

$SA \rightarrow DSE$	DNA.
•	Content is accurate
٠	Content has educational No. 10.
9.	intent is fre of stereot pes.
· · · · ·	Yurpose of package is well defined.
•	Package achieves defined purpose.
•	Content presentation is clear and logical.
0	Difficulty level is appropriate to audience.
0	Gr phics/sound/color are used appropriately
9	Use of package is motivational.
•	Student creativity is effectively stimulated.
•	Feedback is effectively emplered

1 D SD S	<b>X.A.</b>	SAADSD	NA
	Contênt is accurate	•	
	Content has educational views.	0	instruction integrates with prior learn
	intent is free of stereot spes.	•	Learning can be generalized.
	trurpose of package is well defined.	•	User support materials are comprehens.
	Package achieves defined purpose.	•	User support materials are effective.
	Content presentation is clear and logical.	0	Information displays are effective.
9	Difficulty level is appropriate to audience.	0	sers can operate easily and independently
0	Gr phics/sound/color are used appropriately	ė .	chers can employ package easily.
9	Use of package is motivational.	•	aputer capabilities are used appropriately.
•	Student creativity is effectively stimulated.	•	Pengram is reliable in ormal use.
	Feedback is effectively empleated	SA Strongle Sur	er C-Agree D-Dinagree SD - Strong's Omagree N.C. Not Applicab
•		SA Strongly Agri	

Evaluators a dicated that they be a side ा । Rend : । un this package with little or no change:

Northwest Region / Educations and it Northwest Region (Education) 300 S.W. Sixth Avenue \* 103 Juna 1974, in 47207 (503) 277 6800

1 . . . in non is based on the evaluations of three or more reviewers J., inc. Fresentative of potential a confithe courseware pickage

Personal to enroduce this document is cereby granted.

# Diascriptive Reading

Mark: 1982

THOUSE TER: Educational Activities, Inc.

P.O. Box 392

Freeport, NY 11520

EVALUATION COMPLETED ... 33 by the staff and constituents of Region IV 16 cost in, Texas.

71: \$565.00

WHITY\_LEVEL: Grades 3 through 8

SCHUECT: Language Arts

TOPIC: Reading

management

MEDIUM OF TR. NSFER: 5-1,4 in. disk

REQUIRED HARDWARE: Apple II+, disk drive, monitor, Frinter (optional). Also available for PET and TRS-80. REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, standard instruction, enrichment, assessment, instructional

INSTRUCTIONAL TECHNIQUES: Drill and practice

DOCUMENTATION AVAILABLE: In program - pre-test, teacher's information, student's instructions. In upplementary materials — suggested grade/ability wells), instructional objectives, prerequisite skills or notivities; program operating instructions; teacher's information, resource/reference information, student's instructions; follow-up activities:

INSTRUCTIONAL OBJECTIVES: (STATED) This package ь и diagnostic, prescriptive, tutorial reading program the will diagnose the reading skills of each student, prescribe what is needed for improvement, and evaluate performance at each level before directing the student to the mext level.

PISTRUCTIONAL PREREQUISITES: (STATED) Third grade reading level or above.

CONTENT AND STRUCTURE: The diagnostic disk will be used by each student to assign him a starting level in each of the skill areas (lessons). Each of the lessons contains short, informative selections, such as charts or spins. The student made carefully read the tions and respond to qualions. Correct answers are warded with a graphics dy tiv. The six skill areas addressed are: vocabulary a conce, main idea, fact/opinion, details. inf n automatic management system 😗 res for later retrieval L... sautoms cally advance and " the teacher and w mediate students.

TEME REC RED: 15-20 minutes ESTIMATED STUDE per day.

POTENTIAL USES: This package is good for teaching graded reading lessons with emphasis on eye training left to right. It can be utilized for many levels (3-8) in a classroom setting. It works well with many special education students.

MAJOR STRENGTHS: Reading skills can be evaluated fairly quickly. Lessons are short enough to facilitate the short attention span learner. The user is able to retrieve the text before typing his response. The program rewards correct answers as well as correcting incorrect answers. The student who does poorly can be directed to a lower level.

MAJOR WEAR SSES: Sometimes the student has to whit too long to give a response.

OTHER ONIMENTS: The program menu is not retrieved w press the CTRE ke i another sey simultanee by stated in the operating. tructions.

#### EVALUATION SUMMARY

	. Content is accurate.
2	Content has educational value.
,	Content is free of stereotypes.
	Purpose of package is well defined.
•	Package achieves defined purpose.
· • · · · · · · · · · · · · · · · · · ·	Content presentation is clear and logical.
•	Difficulty level is appropriate to addience.
•	Graphics/sound/color are used appropriately
•	Use of package is motivational.
•	Student creativity is effectively stimulated.
3	redback is effectively employed.

•				Learner controls rate and sequence.
	,			Instruction integrates with prior learning.
	,			Learning can be generalized.
	,	 		User support mate. Als are comprehensive.
	•			User support materials are effective.
•				intormation displays are effective.
•	•	 	-	Users can operate easily and independently
•	_		•	Teachers can employ package asily
•		 		Computer capabilities are used apprentately
•		 		Program is reliable in normal use.

Evaluators indicated that they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue . Portland, Oregon 97204 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers B. This evaluation is based on the excellent users of the courseware packing



#### Bric Lerabithia

Micro Skill Bunder Set II

Suntainst Communications 19 Washington Avenue

Pleasantville NY 10.1

EVAL VIII'S COMPLETED TO SEE of the staff and dor tituents of Region IV ISC, Hole Jon, Texas.

COST: 51.

ABILITY in all: Grades 5 through 8

SUBJECT: anguage Arts

TOPIC: Resimig

MEDIUM OF TRANSFER: 5-1/4 in disk

REQUIRED FARDWARE: Apple II, disk drive,

monitor, printer (optional); also available for TRS=80 and PET

REQUIRLD SO TWARE: Apple oft, DOS 3.3 INSTRUCTION ... PURPOSE: Unrichment

INSTRUCTIONAL TECHNIQUES: Drill and practice

DOCUMENTATION AVAILABLE: In program = student's inst. stions, textbook correlation. In applementary materials — suggested grade/ability evel(s), instructional objections, prerequisite skills or activities; sample program coput; program operating instructions, teacher's information, resource/reference intormation, textbook correlation.

INSTRUCTIONAL OBJECTIVES: (STATED) To combine exposure to the best in children's literature with reading skills practice; to stimulate and motivate students through high-interest not terial and microcomputer experience; to build and reinforce comprehension and vocabulary skills; to provide a successful learning experience; and to make reading a Mersambole experience for the non-motivated reader.

INSTRUCTIONAL PREREQUISITES: (STATED) Fourth grade reading level. The user must have read the story Bridge to Terabithia by Kat, erine Patterson before using the computer program;

CONTENT AND STRUCTURE: The disk contains four programs: 1) comprehension, 2) synonym puzzle, 3) sequence, and 4) crossword puzzle which focus on building vocabulary and reading comprehension skills: Students receive immediate feedback as they answer the questions and in many of the programs, they get a second try if the first answer is incorrect: A performance summary is displayed at the end of the program (either on the screen or on a printer). This package is one of a series of 15 packages which correlate with 15 Newbery Award winning children's books.

ESTIMATED STUDENT TIME REQUIRED: 15-20 minutes to complete each of the four programs on the disk.

POTENTIAL USES: This program could be used on an individual basis to encourage reading; or in small group settings.

MAJOR STRENGTHS: Good reinforcement for reading and testing of material. Easy to use for individual students; this program would proving a change of pace for the average student.

MAJOR WEAKNESSES: Grash as abuild be used more effectively in this type of programme.

#### EVALUATION SUMMARY

*	Content is accurate.
9	Content has educational value.
9	Content is free of stereotypes
,	Purpose of package is well defined.
	Package achieves defined purpose.
	Content presentation is clear and logical.
	Difficulty level is appropriate to audience
	Graphics sound color are used appropriately.
	Use of package is motivational.
	Student creativity is effectively stimulated.
	Feedback is affectively employed.

$A_A$	D	SD NA	
0			Learner controls rate and sequence.
•			Instruction integrates with prior learning.
			Learning can be generalized.
		:	User support materials are comprehensive.
•			User support materials are effective.
	•		Information displays are effective.
9			Users can operate easily and independently.
•			Teachers can employ package easily.
	9		Computer capabilities are used appropriately
			Program is reliable in normal use.

A - Strongly Agree A-Agree D-Disagree SD - Strong! Disagree NA - Not Applicable

ivaluates indicated that they would use or recommend use of this package with little or no change.



# Teasers By Tobbs

VERSION: 1983

PRODUCER:

Sunburst Communications 39 Washington Avenue

Pleasantville, NY 10570

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$35:00

ABILITY LEVEL: Grades 3 through 12 SUBJECT: Mathematics TOPIC: Arithmetic, Addition and Multiplication MEDIUN OF TRANSFER: 5-1/4 in. disk REQUIR : D HARDWARE: Apple II+, disk drive, monitor: (so available for TRS-80 I and III cussetts  $32 \, \mathrm{K} \, \, \mathrm{TRS}\text{-80} \, \, \mathrm{HI} \, \, \mathrm{and} \, \, \mathrm{TRS}\text{-80} \, \, \mathrm{4} \, \, \mathrm{diskette},$ 16K At all diskette, and 32K TRS-80 Color comput :

REO: ED SOFTWARE: Applesoft, DOS 3.3 INST: CTIONAL PURPOSE: Remediation, enrich ment

INST LICTIONAL TECHNIQUES: Drill and practice, game, problem solving

DOCUMENTATION AVAILABLE: In program sar the program output, program operating instructions, student's instructions. In supplementary materials — suggested grade ability level(s), instructional objectives, teacher's information, student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) The puzzles provide drill and practice in addition or multiplication: La remitta a lens

INSTRUCTIONAL PREREQUISITES: (STATELY) Third grade reading level. (INFERRED) Knowledge of basic addition and multiplication.

CONTENT AND STRUCTURE: Students are presented with a puzzle that contains three to seven numbers and an addition or multiplication sign in each "box". The student must type in the number that completes the grid in the square(s) where Tobbs is rocated:

ESTIMATED STUDENT TIME REQUIRED: Depending on the level of difficulty of the puzzle and the student's ability: 10-30 minutes

POTENTIAL USES: The package could be used by an individual or small group. It utilizes computational skill and problem-solving strategies.

MAJOR STRENGTHS: The program is a creative way to practice basic fact skills and/or problem solving strategies. It causes students to think and not "rote" facts back.

MAJOR WEAKNESSES: The game has limited use in an instructional setting as a unique piece of software. Students may love interest in following. the same rules and seeing the same screen layout over a period of time. Possibly it should be included as part of a more comprehensive package.

CTHER COMMENTS: The increased emphasis on problem-solving strategies is an excellent plus to the program providing a good use of the microcomputer.

#### **EVALUATION SUMMARY**

SALA D S	DNA
3	Content is accurate.
•	Content has educational value.
8	Content is free of stereotypes.
•	Purpose of package is well defined. — —
•	, Package achieves defined purpose.
	Content presentation is clear and logical.
*	Difficulty level is appropriate to audience
	Graphics/sound/color are used appropriately
	Use of package is motivational.
•	Student creativity is effectively stimulated.
k	the representation of the second seco

•.	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized.
	User support materials are comprehensive.
•	User support materials are effective.
	Information displays are effective.
	Users can operate easily and independently.
9	Teachers can employ package easily.
•	Computer capabilities are used appropriately
	Program is reliable in normal use.

Eval maters indicated that they would use or recommend use of this package with little or no change:



## Call of the Wild

Patolil - LK:

A/V Concepts Corporation 38 Montauk Boulevard Oakdale: NY 11769

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$189.00 for three titles

ABILITY LEVEL: Grades 3 through 10 SUBJECT: Language Arts
FOPIC: Reading
VELLEY OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: 48k Apple II+, disk
REQUIRED SOFTWARE: Applesoft, DOS 3:3
INSTRUCTIONAL PURPOSE: Remediation,
RANDER OF TRANSFER: DOS 3:3
INSTRUCTIONAL TECHNIQUES: Drill and
Practice

student's instructions. In supplementary materials -- post-test, student a instructions, follow-up activities:

NSTRUCTIONAL OBJECTIVES: (INFERRED) increase reading speed; increase comprehension skills; develop voorbulary

INSTRUCTIONAL PREREQUISITES:

- NEERRED' Child must be able to read at approximately third grade level.

CONTENT AND STRUCTURE: In this "Classics in Theraputic Readability for Contained Reading" series, after completing the preparatory workbook, the student reads the story as it appears on the screen. Word rate can be set from 40-520 wpm and the student has the option of reading full lines or as a controlled reader. Then the student completes a comprehension check as well as a cocabulary check in the workbook.

ESTIMATED STUDENT TIME REQUIRED: 15-30 minutes for each lesson depending on reading rate of student using the program.

POTENTIAL USES: This package would be used to increase reading rate by one student at a time. The package could be used to motivate students with lower than average reading ability:

MAJOR ST ENGTHS: The stories are well written and interesting. Reading rate is adjustable. High interest/low vocabulary requirement makes this a good package. The programs are easy for the students to use; directions are clear.

MAJOR WEAKNESSES: Students must use workbook to prepare for controlled residing as well as to take quizzes after using the computer: Quizzes (with feedback) should be on the computer: Can't find a way to stop a program without going back to the beginning and playing the songs all over again. The manual needs more detailed explanation for the mether concerning objectives, time needed and now to run the program:

#### -VALUATION SUMMARY

SA X D SD	NA	SÄÄDS
•	Content is scurate.	0
•	cational value.	
· · · · · · · · · · · · · · · · · · ·	stereotypes.	\$
•	je is well defined	
• • • • • •	defined purpose.	
	Content presentation is clear and logical.	•
	Difficulty level is appropriate to malence.	
• • • • • • • • • • • • • • • • • •	Graphics sound color are used apply relately	
* <u>*</u> * * * * * *	Use of package is motivational.	
	Student creativity is effectively stimic; ed -	•
	Feedback is effectively employed.	SA - strongly 5
		sala ara d

6		-	-		Learner Controls rate and sequence
			1		Instruction integrates with prior learning.
	٠	•			Learning can be generalized.
		•			User süppört materials are comprehensive.
-	a		-		User support materials are effective.
	•			-	Intormation displays are effective.
				'	Esers can operate easily and independently.
		•	•		feachers can employ package easily
	-		4.	•	Computer capabilities are used appropriately
	٠.	٠	-	• .	De la company de

SA estrongic Agree A Agree De Disagree (De Strongis Disagree (AA et al. Approache

Program is reliable in normal use

Evaluators indicated that they would use or recommend us of this package with little or no change.



Significational Laboratory 1668 W. Sixth Avenue • Portland, Oragon 97204 150 at 248,0800



This evaluation is based on the evaluations of three or more reviewer who are representative of potential users of the courseware passage

### Facemaker

PRODUCER:

Spinnaker Software

215 First Street

Cambridge, MA 02142

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$34.95

ABILITY LEVEL: Preschool through grade 3 SUBJECT: Basic Skills, Computer Science, Mathematics

TOPIC: Programming, Logic, Memory skills MEDIUM OF TRANSFER: 5-1/4 in. disk REQUIRED HARDWARE: 48K Apple II+, disk drive, color monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, standard instruction, enrichment INSTRUCTIONAL TECHNIQUES: Game

DOCUMENTATION AVAILABLE: In program program operating instructions, student's instructions. In supplementary materials suggested grade/ability level(s), instructional objectives, program operating instructions, teacher's information, student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED) This program provides a gentle introduction to programming. It develops keyboard familiarity and assists in developing visual and auditory sequential memory.

INSTRUCTIONAL PREREQUISITES: (INFERRED) The child must have the ability to follow simple directions.

CONTENT AND STRUCTURE: In this educational program, which is disguised as a game, the user can build a face, animate a face (make eyes wink, ears wiggle, lips move, etc.), or play a memory game with the computer.

ESTIMATED STUDENT TIME REQUIRED: 5-10 minutes per activity

POTENTIAL USES: This program could effectively be used as a reward for good behavior or for remediation or reinforcement in a special or regular education classroom. It could be used with small groups as well as for individual use, and also with gifted students.

MAJOR STRENGTHS: The directions are simple and always available to the user as he/she is using the program. The program is fun to use and provides a moderate amount of creativity. The graphics, animation and sound are motivational and effectively used.

MAJOR WEAKNESSES: Sticking out the tongue at the wrong response (in the game portion of the program) might be objectionable to some persons. Possibly the frown would have been a better choice.

#### **EVALUATION SUMMARY**

•	Content is accurate:
•	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
• .	Content presentation is clear and logical.
•	Difficulty level is appropriate to audience.
	Graphics/sound/color are used appropriately.
•	Use of package is motivational.
•	Student creativity is effectively stimulated.
•	Feedback is effectively employed.

SA	A	D	SD	NA	
ē					Learner controls rate and sequence,
	•				Instruction integrates with prior learning.
	•	,			Learning can be generalized.
	•				User support materials are comprehensive.
	•			- 1	User support materials are effective.
•					Information displays are effective:
•					Users can operate easily and independently.
•					Teachers can employ package easily:
•				. ]	Computer capabilities are used appropriately.
•					Program is reliable in normal use:

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would highly recommend this package.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package

# Map Reading

VERSION: 1980

PRODUCER:

Micro Power and Light Company

12820 Hillcrest Road

Suite 244

Dallas, TX 75220

EVALUATION COMPLETED: June 1983 by the staff and constituents of Linn-Benton ESD, Albany, Oregon.

COST: \$19.95

ABILITY LEVEL: Grades 4 through 7
SUBJECT: Social Studies, Science
TOPIC: Geography, Physical-Science
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: 32K Apple II+, disk
drive, monitor
REQUIRED SOFTWARE: Applesoft, DOS 3.2 or 3.3
INSTRUCTIONAL PURPOSE: Standard instruction
INSTRUCTIONAL TECHNIQUES: Drill and
practice, tutorial

DOCUMENTATION AVAILABLE: In program — sample program output. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, program operating instructions, post-test, teacher's information.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
Master map reading; have fun in map reading;
become familiar with the compass; learn concept of
scale; learn distance and direction notation.

INSTRUCTIONAL PREREQUISITES: (STATED)

Desire to master map reading. Intended for fourth

graders and older. Ability to multiply single digit whole numbers.

CONTENT AND STRUCTURE: Package contains one disk with minimal written information. It lacks ecord keeping and reporting functions. Structure is demonstration followed by drill and practice.

ESTIMATED STUDENT TIME REQUIRED: 10 to 25 minutes at various times during the week.

POTENTIAL USES: This package could be used in introducing map reading skills for grades 4-6. It may also be used for reinforcement of these skills, and for individual pr small groups of no more than three.

MAJOR STRENGTHS: Program initiates positive attitude in students by setting the stage with "fun" learning activities. Since there is no time limit, it allows for individual differences. The directions are clear. The use of the compass is commendable.

MAJOR WEAKNESSES: It is inconsistent in directions. It tells you to use the "return key" and other times, the "space bar" to move on. The first stage should not accept dual answers in the compass program. No accurate instructions are given to enter the scale of the program. Due to distractions the student could easily miss counting the dots. It might be better to put dashes so the student could count them easier. More difficult problems could be used.

#### **EVALUATION SUMMARY**

	•	1	<u> </u>		Content is accurate.
	•	1.			Content has educational value.
		Ţ.	i i	•	Content is free of stereotypes.
	Ī				Purpose of package is well defined.
:	•				Package achieves defined purpose.
	•				Content presentation is clear and logical.
	•				Difficulty level is appropriate to audience.
	•				Graphics/sound/color are used appropriately.
	ē				Use of package is motivational.
	ē				Student creativity is effectively stimulated.
1	•				Feedback is effectively employed.

•	Learner controls rate and sequence.
	Instruction integrates with prior learning.
	Learning can be generalized.
•	User support materials are comprehensive.
•	_ User support materials are effective.
	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
•	Computer capabilities are used appropriately.
	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



# Floppy Teaches How to Print Letters and Numerals

VERSION: 1983

PRODUCER: \Floppy Enterprises

716 E. Fillmore Avenue Eau Claire, WI 54701

EVALUATION COMPLETED: June 1983 by the staff and constituents of Linn-Benton County ESD, Albany, Oregon.

COST: \$34.95

ABILITY LEVEL: Preschool through grade 1
SUBJECT: Language Arts
TOPIC: Writing
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: Apple II+, single disk
drive, black/white monitor recommended
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Standard
instruction, remediation
INSTRUCTIONAL TECHNIQUES: Drill and
practice, tutorial, simulation

DOCUMENTATION AVAILABLE: In program — program operating instructions, pretest, teacher's information, and student's instructions. In supplementary materials — instructional objectives, program operating instructions, and teacher's information.

INSTRUCTIONAL OBJECTIVES: (STATED) To assist children in mastering the many skills and abilities involved in learning to print letters and numerals. Objectives are stated in detail in the supplementary materials.

INSTRUCTIONAL PREREQUISITES: Students must have developed fine motor coordination.

CONTENT AND STRUCTURE: Consists of one diskette and one teacher's guide. Both have detailed instructions, main menu, and sub-menus to aid in choosing the particular drill they wish to use.

ESTIMATED STUDENT TIME REQUIRED: 10-1 minutes per day

POTENTIAL USES: The program is suitable for use with individuals, with small groups, and as a classroom demonstration.

MAJOR STRENGTHS: Use of 3 dotted lines for letter formation. The appearance of "Floppy" at the end of each letter formation. Good instruction IF school district uses this particular way to make letters and numerals. Good documentation for use by the teacher, containing a "Hint for Helping the Child" section.

MAJOR WEAKNESSES: Not all school districts use this method to teach letters and numerals. If they don't, to use this as a tutorial would only confuse the students. Students would be exposed to inaccurate formation of numerals and letters and different models used in simulation. An example of this is pointed out by one evaluator—who stated: "Our district uses Zaner-Bloser and our Reading Program is Addison-Wesley and it is based on one-stroke formation." Considering the age level of the target group of this program, the atteacher would have to determine which drill to use for each student.

#### **EVALUATION SUMMARY**

7		1 .	$\overline{}$	Z
1	<u> </u>	-		Content is accurate.
•	- }	-		Content has educational galue.
1	1 .		ē	Content is free of stereotypes.
	•	-		Purpose of package is well defined.
		ē		Package achieves defined purpose.
•				Content presentation is clear and logical.
	ē			Difficulty level is appropriate to audience.
	•		,	Graphics/sound/color are used appropriately.
	$\Gamma$	•		Use of package is motivational.
		ē		Student creativity is effectively stimulated.
			•	Feedback is effectively employed.

SA A D SD NA

•	Learner controls rate and equence.
•	Instruction integrates with prior learning.
. •	Learning can be generalized.
•	User support materials are comprehensive.
. •	User support materials are effective.
•	Information displays are effective.
i ii	Users can operate easily and independently.
•	Teachers can employ package easily.
	Computer capabilities are used appropriately:
• ;	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package only if certain changes were made.



This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.



### Riddle Me This

PRODUCER:

Data Command, a Division of Imperial International Education

P.O. Box 548

Kankakee, H. 60901

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV ISC, Houston, Texas.

COST: \$85.25

ABILITY LÉVEL: Grades 4 through 7

SUBJECT: Language Arts

TOPIC: Grammar

MEDIUM OF TRANSFER: 5 1/4 in. disk

REQUIRED HARDWARE: 48K Apple II or Apple II+, disk

drive, monitor

REQUIRED SOFTWARE: Applesoft in ROM, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, standard instruction, enrichment

INSTRUCTIONAL TECHNIQUES: Drill and practice,

tutorial, game

DOCUMENTATION AVAILABLE: in program instructional objectives, sample program output, teacher's information, student's instructions. In supplementary materials — instructional objectives, program operating instructions, teacher's information.

INSTRUCTIONAL OBJECTIVES: (STATED) The student is challenged to use his word recognition skills within the context of the riddles. He may be asked to type the correct two-word form of a contraction, to think of a homonym, or to type a possessive showing the relationship between two things mentioned in the riddle.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Reading skills are necessary to interact with the program. The reading level is not specified but is probably about third grade level. Direct instruction in homorisms, contractions, and possessives should precede the use of these programs.

CONTENT AND STRUCTURE: The package consists of three disks and a teacher's guide. Each disk contains three rounds of 12 riddles each, for a total of 36 riddles per disk. Each disk provides brief instruction in the specific skill - homonyms, contractions, or possessives followed by an example of the task. The student may then choose one of the three rounds. At the completion of the round, the student receives a score and is instructed to inform his teacher who can then type a CTRL-T to review the student's score and incorrect responses. The teacher's guide also includes a form for keeping class records of the student scores on each round.

ESTIMATED STUDENT TIME REQUIRED: 10-15 minutes per day.

POTENTIAL USES: The program could be used for individual or group work. The package would most effectively be used as a drill and practice exercise after direct classroom instruction in the specific skill. The programs would be good also for either remediation or enrichment.

MAJOR STRENGTHS: The package is extremely motivating and very interesting to students. The riddles are very entertaining and the programs technically well done. There is a good display of results at the end of each round that can be viewed by the teacher.

MAJOR WEAKNESSES: Documentation needs to be more comprehensive, i.e., specific instructional objectives and prerequisite reading skills needed.

#### **EVALUATION SUMMARY**

SA A D SD NA

•	<u> </u>		, ] '	Content is accurate.
	•			Content has educational value.
•	Ī			Content is free of stereotypes.
•	1	Ν.		Purpose of package is well defined.
	•		T	Package achieves defined purpose.
	•		,	Content presentation is clear and logical.
	•			Difficulty level is appropriate to audience.
•			:	Graphics/sound/color are used appropriately.
•				Use of package is motivational.
c	•			Student creativity is effectively stimulated.
	•			Feedback is effectively employed;

SA A D SD NA

	•				Learner controls rate and sequence,
,	•		T	1	Instruction integrates with prior learning-
	•	Ī		,	Learning can be generalized:
	•			Ī	User support materials are comprehensive.
	•		1	Ţ	User support materials are effective:
•			Ī		Information displays are effective.
•				i	Users can operate easily and independently.
٠			Ī		Teachers can emptor package casity.
-	•				Computer capabilities are used appropriately.
ζ.	•		Ĭ.		Program is reliable in normal use:

SA - Strongly Agree A-Agree D. Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

# English, Volume 1

VERSION: 1.1

PRODUCER:

MECC

2520 Broadway Drive Lauderdale, MN 55113

EVALUATION COMPLETED: June 1983 by the staff and constituents of Linn-Benton ESD, Albany, Oregon.

COST: \$39.00

ABILITY LEVEL: Grades 6 through 8
SUBJECT; Language Arts
TOPIC: Vocabulary, Grammar
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: Apple II+
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Remediation,
standard instruction, enrichment
INSTRUCTIONAL TECHNIQUES: Drill and
practice, tutorial

DOCUMENTATION AVAILABLE: In program — sample program output, student's instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, sample program output, program operating instructions, teacher's information, student worksheets, follow-up activities.

INSTRUCTIONAL OBJECTIVES: (INFERRED)
Teaches the student the parts of speech and
reinforces skills with drill and practice.

CONTENT AND STRUCTURE: One diskette and an 87-page teacher's guide which includes pages to be

copied for keeping a record of an individual student's progress. Sections included are: nouns, verbs, pronouns, adjectives, adverbs, prepositions, conjunctions, and interjections.

ESTIMATED STUDENT TIME REQUIRED: 15 minutes per day for one to two weeks

POTENTIAL USES: To be used for individual student practice. Segments of the program might be incorporated into class demonstration and discussion.

MAJOR STRENGTHS: The descriptions on the screen are clear. Good graphic displays that use arrows to identify parts of speech. These are usually presented after an error and help clarify concepts. Good documentation, including record sheets and instructions on using the computer for teachers without much computer experience.

MAJOR WEAKNESSES: Program unclear about specific characteristics of determiners. For example, the word "many" is identified as an adjective, but the word "both" is not. Would the distinction be clear to students? Perhaps a section explaining determiners should be added to the menu. There is also an error in the "interjection" segment of the program. The "exclamation point" is incorrectly called an "explanation point."

OTHER COMMENTS: The producer indicated that version 1.3 is currently in distribution and the problem with the "interjection" segment of the program has been corrected.

#### **EVALUATION SUMMARY**

SA A D SDNA

•	Content is accurate.
	Content has educational value.
•	Content is free of stereotypes.
•	Purpose of package is well defined.
•	Package achieves defined purpose.
• ;	Content presentation is clear and logical.
• •	Difficulty level is appropriate to audience.
ē	Graphics/sound/color are used appropriately.
•	Use of package is motivational.
	Student creativity is effectively stimulated.
•	Feedback is effectively employed.

SA A D SD NA

	. •		Learner controls rate and sequence.
	•	- 1	Instruction integrates with prior learning.
7	•		Learning can be generalized.
	•		User support materials are comprehensive.
•			User support materials are effective.
	•		Information displays are effective.
•			Users can operate easily and independently.
•			Teachers can employ package easily.
	•		Computer capabilities are used appropriately.
	•	1	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 11 101 1 300 S.W. Sixth Avenue • Portland, Oregon 97204 101 (503) 248-6800

This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

## Story Machine

PRODUCER:

Spinnaker Software

215 First Street

Cambridge, MA 02142

EVALUATION COMPLETED: June 1983 by the staff and constituents of Region IV, ISC, Houston, Texas

COST: \$39.95

ABILITY LEVEL: Preschool through grade 3
SUBJECT: Language Arts
TOPIC: Grammar, Vocabulary, Writing.
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: 48K Apple II or Apple
II+; disk drive, monitor,
REQUIRED SOFTWARE: Applesoft; DOS 3.3
INSTRUCTIONAL PURPOSE: Enrichment
INSTRUCTIONAL TECHNIQUES: Game, simulation

DOCUMENTATION AVAILABLE: In program — program operating instructions. In supplementary materials — suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, program operating instructions, student's instructions.

INSTRUCTIONAL OBJECTIVES: (STATED)
Children will attai: a new sight vocabulary.
Children will gain an awareness of grammar rules.
A positive attitude toward writing will be attained. Children will write longer stories.
Children will gain familiarity with the keyboard.

INSTRUCTIONAL PREREQUISITES: (STATED)
For children five years old or older. Children who
can only read 10 of the words used by the program.

CONTENT AND STRUCTURE: Children can write their own stories utilizing words that are identified on a word list. As each sentence is written, the story is animated on the top portion of the screen. If the child enters a sentence with incorrect grammar or spelling errors, the computer will not accept the word or sentence.

ESTIMATED STUDENT TIME REQUIRED: 19-15 minutes per day.

POTENTIAL USES: To allow young children to create their own stories and save them to be retrieved later — possibly during the storytime period. It can also provide students with practice in constructing grammatically correct sentences.

MAJOR STRENGTHS: The program is highly motivational — the child sees his story come to life. It allows for success for the student.

MAJOR WEARNESSES: The vocabulary is limited. It would be nice if the teacher could store another word list or increase the original list. When one story is completed, the program has to be started from the beginning (title page) before attempting a new story. An option should be provided to erase memory and write another story.

THER COMMENTS: Provision of a more difficult version for upper elementary students would be helpful.

#### **EVALUATION SUMMARY**

SA	A	D	SDI	ΝĀ	
	•			ĺ	Content is accurate.
	•				Content has educational value.
	•				Content is free of stereotypes.
	•			Ĭ	Purpose of package is well defined.
	•				Package achieves defined purpose.
	•	-			Content presentation is clear and logical.
	•			:	Difficulty level is appropriate to audience.
•			15	•	Graphics/sound/color are used appropriately.
•				T	Use of package is motivational.
•					Student creativity is effectively stimulated.
	•				Feedback is effectively employed.

SA A D SD NA

	•		Learner controls rate and sequence.
	•		Instruction integrates with prior learning.
	•	1:	Learning can be generalized.
•			User support materials are comprehensive.
•			User support materials are effective.
0			Information displays are effective.
	•		Users can operate easily and independently.
•			Teachers can employ package easily.
	•		Computer capabilities are used appropriately.
	•		Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue • Portland, Oregon 97204 (503) 248-6800 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

# Social Studies, Volume 2

ABILITY LEVEL: Grades 4 through 12

VERSION: 4.2

PRODUCER: MECC

2520 Broadway Drive Lauderdale, MN 55113

EVALUATION COMPLETED: June 1983 by the staff and constituents of Linn-Benton ESD, Albany, Oregon.

COST: \$41.00

SUBJECT: Social Studies MEDIUM OF TRANSFER: 5-1/4 in. disk REQUIRED HARDWARE: 32K Apple II, single disk drive, monitor REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Remediation, standard instruction, enrichment, assessment INSTRUCTIONAL SECHNIQUES: Drill and practice, tutorial, instructional management, information retrieval, game, simulation, problem solving

DOCUMENTATION AVAILABLE: In supplementary materials - suggested grade/ability level(s), instructional objectives, prerequisite skills or activities, sample program output, program operating instructions, teacher's information, resource/reference information, student's instructions, student's worksheets, textbook correlation.

INSTRUCTIONAL OBJECTIVES: (INFERRED) Develop students ability to make decisions; familiarize student with content area such as nations, continents and states; develop student ability to recall and synthesize information; and develop an awareness of the problems that existed in early U.S. history:

INSTRUCTIONAL PREREQUISITES: (INFERRED) Should have the ability to read at 10-12 grade level. Students should be thoroughly familiar with operation of microcomputer.

CONTENT\_AND STRUCTURE: Seven programs are included: BARGAIN involves collective bargaining in business/labor relations. COUNTRY involves countries and capitals. CRISES involves moves and countermoves in international conflicts. FAIL SAFE involves decision making with the President and advisors. MINING involves information retrieval using Minnesota agricultural data. STATES deals with capitals and shape recognition.

ESTIMATED STUDENT TIME REQUIRED: 30 minutes per session

POTENTIAL USES: Can be used from grades 5 through 12 with economics, political science, geography, and American/world history classes. Could also be used with adults.

MAJOR STRENGTHS: The directions are clearly stated. It helps the student to make use of thinking skills such as logic, memory, and synthesis. Provides immediate response and reinforcement. "Fail Safe" is particularly good in decision making. Provides enough responses to eliminate guessing.

MAJOR WEAKNESSES: Graphics were difficult to read. Color could be better. The length of display times tends to lose the student's interest.

#### **EVALUATION SUMMARY**

SA. A. D. SD.NA

•		⊥ .	Content is accurate.
•	-3		Content has educational value.
		•	Content is free of stereotypes.
•			Purpose of package is well defined.
•		$\top$	Package achieves defined purpose.
•			Content presentation is clear and logical.
•			Difficulty level is appropriate to audience.
		•	Graphics/sound/color are used appropriately.
•	$\neg$	i	Use of package is motivational.
•			Student creativity is effectively stimulated.
•	1.		Feedback is effectively employed.

SA. A. D.SD NA.

•	Learner controls rate and sequence.
•	Instruction integrates with prior learning.
•	Learning can be generalized.
- •	User support materials are comprehensive.
•	User support materials are effective.
•	Information displays are effective.
•	Users can operate easily and independently.
•	Teachers can employ package easily.
• ,	Computer capabilities are used appropriately.
•	Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



Northwest Regional Educational Laboratory 300 S.W. Sixth Avenue . Portland. Oregon 97204 This evaluation is based on the evaluations of three or more reviewers who are representative of potential users of the courseware package.

# Master Type

VERSION: 1982

PRODUCER:

Lightning Software

P.O. Box 11725

Palo Alto, CA 94306

EVALUATION COMPLETED: June 1983 by the staff and constituents of the Alaska Department of Education, Juneau, Alaska.

COST: \$39.95

ABILITY LEVEL: Grades 4 through postsecondary SUBJECT: Business Education

TOPIC: Office occupations

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II, single disk

drive, monitor

REQUIRED SOFTWARE: Applesoft, DOS 3.3 INSTRUCTIONAL PURPOSE: Standard instruction, enrichment

INSTRUCTIONAL TECHNIQUES: Authoring, drill and practice, game

program operating instructions, and student's instructions. In supplementary materials—program operating instructions, teacher's information, student's instructions, and follow-up activities.

INSTRUCTIONAL OBJECTIVES: (INFERRED) To provide touch typing drill and practice

INSTRUCTIONAL PREREQUISITES: (STATED)
Students should read and do the activities in the
manual prior to using the game. Students must be
familiar with home row keys:

CONTENT AND STRUCTURE: MasterType is a touch typing drill and practice game where enemy words on the screen attack the user's base. The student must correctly type the words to defend the base. The package provides a way to create your own lesson by entering words other than those provided with the package.

ESTIMATED STUDENT TIME REQUIRED:
MasterType has 18 different skill levels. The total
time necessary to progress through these levels is
dependent on the student's ability, age, motivation
and previous experience.

POTENTIAL USES: The MasterType Instructional Game is an excellent drill and practice activity for typing students. It also can be used with elementary students to teach the keyboard. Adult supervision of elementary students using MasterType is advisable to ensure proper finger placement.

MAJOR STRENGTHS: MasterType makes excellent use of graphics and sound to create a typing game with multiple skill levels. Lessons are carefully sequenced. Feedback and reinforcement are immediate. User options include printing performance record on screen, deleting sound, and changing the speed of the game at each level.

MAJOR WEAKNESSES: This activity may be frustrating to young students. Without adequate supervision, MasterType can become a hunt and peck areade game.

OTHER COMMENTS: Master Type is fun and challenging for both the experienced and novice typist.

#### **EVALUATION SUMMARY**

SA A D SDNA

	•		Content is accurate.
	•		Content has educational value.
•			Content is free of stereotypes.
;	•		Purpose of package is well defined.
	ē		Package achieves defined purpose.
	ĕ		Content presentation is clear and logical.
•		•	Difficulty level is appropriate to audience.
•			Graphics/sound/color are used appropriately.
•			Use of package is motivational.
		•	Student creativity is effectively stimulated.
	ā		Feedback is effectively employed.

SA A D SD NA

	•		1	Learner controls rate and sequence.
			•	Instruction integrates with prior learning.
	•			Learning can be generalized.
_		•		User support materials are comprehensive.
	•			User support materials are effective.
	•			Information displays are effective.
	•	•		Users can operate easily and independently.
	•			Teachers can employ package easily.
•				Computer capabilities are used appropriately.
	•			Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



## **Word Master**

VERSION: 1983

PRODUCER:

DLM, Inc.

P.O. Box 4000 Allen, TX 75002

EVALUATION COMPLETED: June 1983 by the staff and constituents of Linn-Benton County ESD, Albany, Oregon.

COST: \$44.00

ABILITY LEVEL: Grades 4 through 7 SUBJECT: Language Arts

TOPIC: Vocabulary

MEDIUM OF TRANSFER: 5-1/4 in. disk

REQUIRED HARDWARE: 48K Apple II, disk drive,

monitor (color recommended)

REQUIRED SOFTWARE: Applesoft, DOS 3:3

INSTRUCTIONAL PURPOSE: Standard instruction, remediation

INSTRUCTIONAL TECHNIQUES: Drill and practice, game

DOCUMENTATION AVAILABLE: In supplementary materials — instructional objectives, program operating instructions, teacher's information, student's instructions, student worksheets, follow-up activities.

INSTRUCTIONAL OBJECTIVES: (STATED) To provide motivating and challenging practice recognizing pairs of words which represent antonyms, synonyms, and homonyms.

CONTENT AND STRUCTURE: Word Master provides the player with practice in identifying pairs of words that are antonyms, synonyms, or homonyms. The colorful screen provides a futuristic view from a sighting scope. The word scope, a large diamond in the center of the screen, contains the word to be matched.

It is to be matched with one of the eight words in blue word stations in the four quadrants of the screen. The diamond-shaped word scope has a white "sight" device that can be moved to aim at the word stations to make a match. After aiming at the correct word match, the player then fires at the matching word station to score a hit. The type of match to be made (antonym, homonym, or synonym) is listed at the bottom of the screen. While the game is played, electronic rays come from the word stations toward the word scope. The player must make all eight matches before one of these rays reaches the word scope. If a ray reaches the word scope, it disintegrates the scope and the game resets. If this occurs three times before the time limit for the game is reached, the game is over.

ESTIMATED STUDENT TIME REQUIRED: 15 minutes twice a week for a six-week period

POTENTIAL USES: I see real potential for student realization of synonyms and antonyms. Use may be as a short unit on synonyms/antonyms, OR as a reward for completing an assignment (i.e., complete a written assignment and earn 15 minutes on the computer).

MAJOR STRENGTHS: The game as a visual experience is motivating and challenging. It is a simple matter to complete the required task. The program provides excitement. The speed or degree of challenge may be regulated.

MAJOR WEAKNESSES: The directions should be on the disk. The student must read the directions in a booklet to play the game as it is presently packaged.

OTHER COMMENTS: This program is a valuable learning tool.

#### **EVALUATION SUMMARY**

SA.A.	D SD	NA	·
•;			Content is accurate:
•			Content has educational value.
•		ļ	Content is free of stereotypes.
•			Purpose of package is well defined.
0.			Package achieves defined purpose.
•			Content presentation is clear and logical.
-		•	Difficulty level is appropriate to audience.
•	V.		Graphics/sound/color are used appropriately.
•	_ [		Use of package is motivational.
		•	Student creativity is effectively stimulated.
•			Feedback is effectively employed

SA A D SD NA

			L-		Learner controls rate and sequence.
•			_	<u></u>	Instruction integrates with prior learning.
		_	-	•	Learning can be generalized.
-:	ı				User support materials are comprehensive.
•					User support materials are effective
•					Information displays are effective.
•					Users can operate easily and independently.
•					Teachers can employ package easily.
	•				Computer capabilities are used appropriately
•		اذ			Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.



### Cartels and Cutthroats

VERSION: 1.1, copyright 1981

PRODUCER:

Strategic Simulations, Inc. 465 Fairchild Drive, Suite 108 Mountain View, CA 94043

EVALUATION COMPLETED: May 1983 by the staff and constituents of Lehigh University, Bethlehem, Pennsylvania.

COST: \$39:95

ABILITY LEVEL: Grades 8 through 12
SUBJECT: Social Studies/Social Science
TOPIC: Economics
MEDIUM OF TRANSFER: 5-1/4 in. disk
REQUIRED HARDWARE: 48K Apple II, single
disk drive, monitor, game paddles
REQUIRED SOFTWARE: Applesoft, DOS 3.3
INSTRUCTIONAL PURPOSE: Enrichment
INSTRUCTIONAL TECHNIQUES: Game,
simulation

DOCUMENTATION AVAILABLE: In supplementary materials — program operating instructions and student's instructions.

INSTRUCTIONAL OBJECTIVES: (INFERRED) To develop the student's skills in business management.

INSTRUCTIONAL PREREQUISITES: (INFERRED) Knowledge of basic economic terms such as GNP, CPI, Prime Rate, etc.

CONTENT AND STRUCTURE: This game is a simulation of the business world. Each player runs a manufacturing company that buys raw materials, produces finished goods and sells those finished goods in a competitive market.

ESTIMATED STUDENT TIME REQUIRED: Three hours per session (can be broken up), 3 or more times

POTENTIAL USES: Program could be used in a high school economics class or business administration course to reinforce concepts and allow students to internalize marketing and production strategies. Program is best used independently by small groups of students competing against each other. It is, however, very time-intensive:

MAJOR STRENGTHS: Very valuable program for teaching concepts and strategies in business economics. These concepts and strategies simulate those necessary to run an actual business and are normally very hard to learn any other way.

MAJOR WEAKNESSES: Program is very long in playing time. Some familiarity with economics and business concepts is necessary. Program crashed several times in response to inappropriate input. It could use better error-trapping!

#### EVALUATION SUMMARY

er a B CDNA

•					Content is accurate.
•					Content has educational value.
•					Content is free of stereotypes.
•		,			Purpose of package is well defined.
	•				Package achieves defined purpose.
	•			-	Content presentation is clear and logical.
	-	-	•		Difficulty level is appropriate to audience.
	•		•		Graphics/sound/color are used appropriately.
	•				Use of package is motivational.
	•				Student creativity is effectively stimulated.
_	ē				Feedback is effectively employed.

SA	Ä	D	SD	NĀ	
	•				Learner-controls rate and sequence.
				•	Instruction integrates with prior learning.
. •					Learning can be generalized.
•					User support materials are comprehensive.
•		T	I		User support materials are effective.
	ē				Information displays are effective.
	ē				Users can operate easily and independently.
	ē			ļI	Teachers can employ package easily
•		•	ļ		Computer capabilities are used appropriately.
	ė				Program is reliable in normal use.

SA - Strongly Agree A-Agree D-Disagree SD - Strongly Disagree NA - Not Applicable

Evaluators indicated that they would use or recommend use of this package with little or no change.

